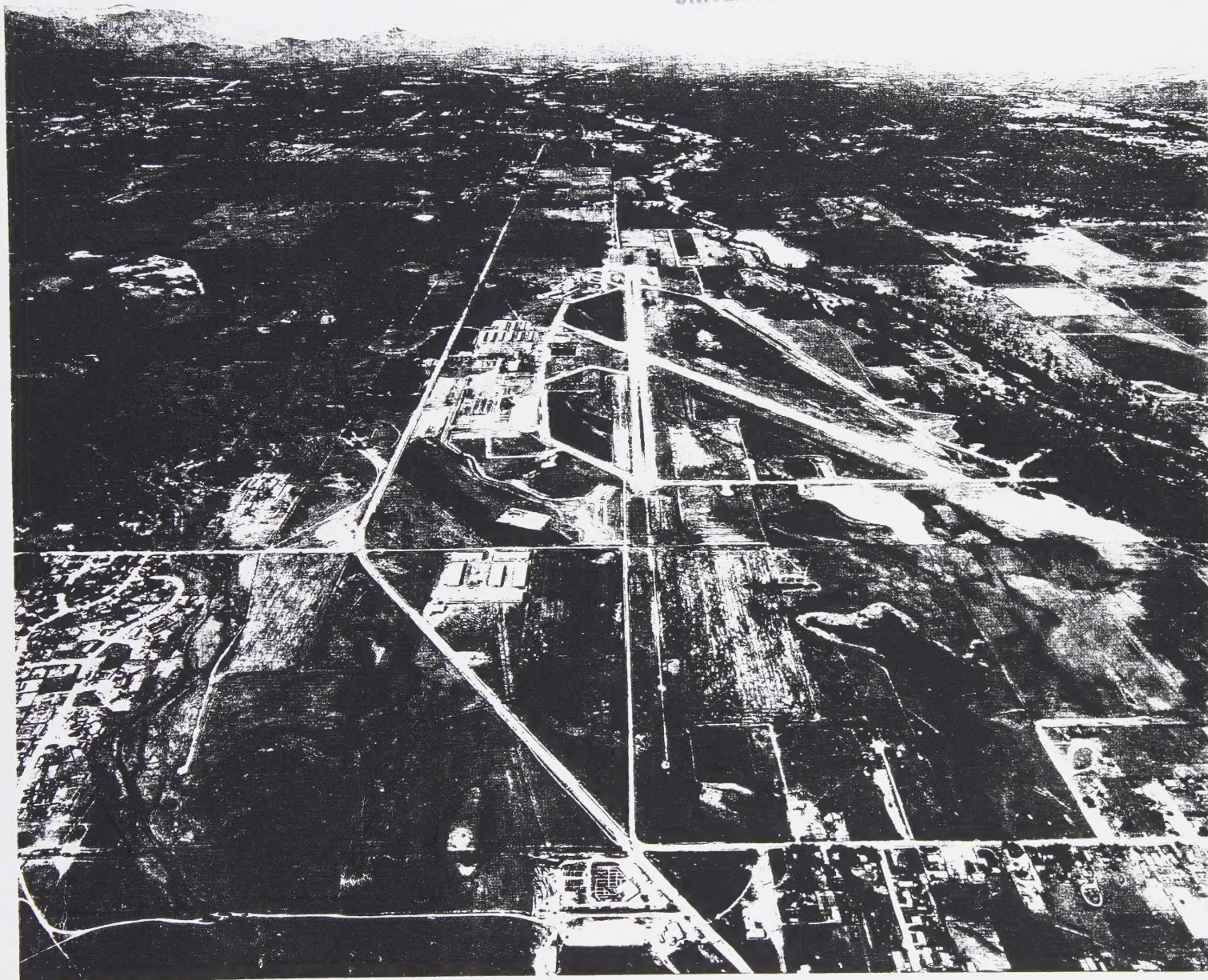


Redding Municipal Airport Area Plan

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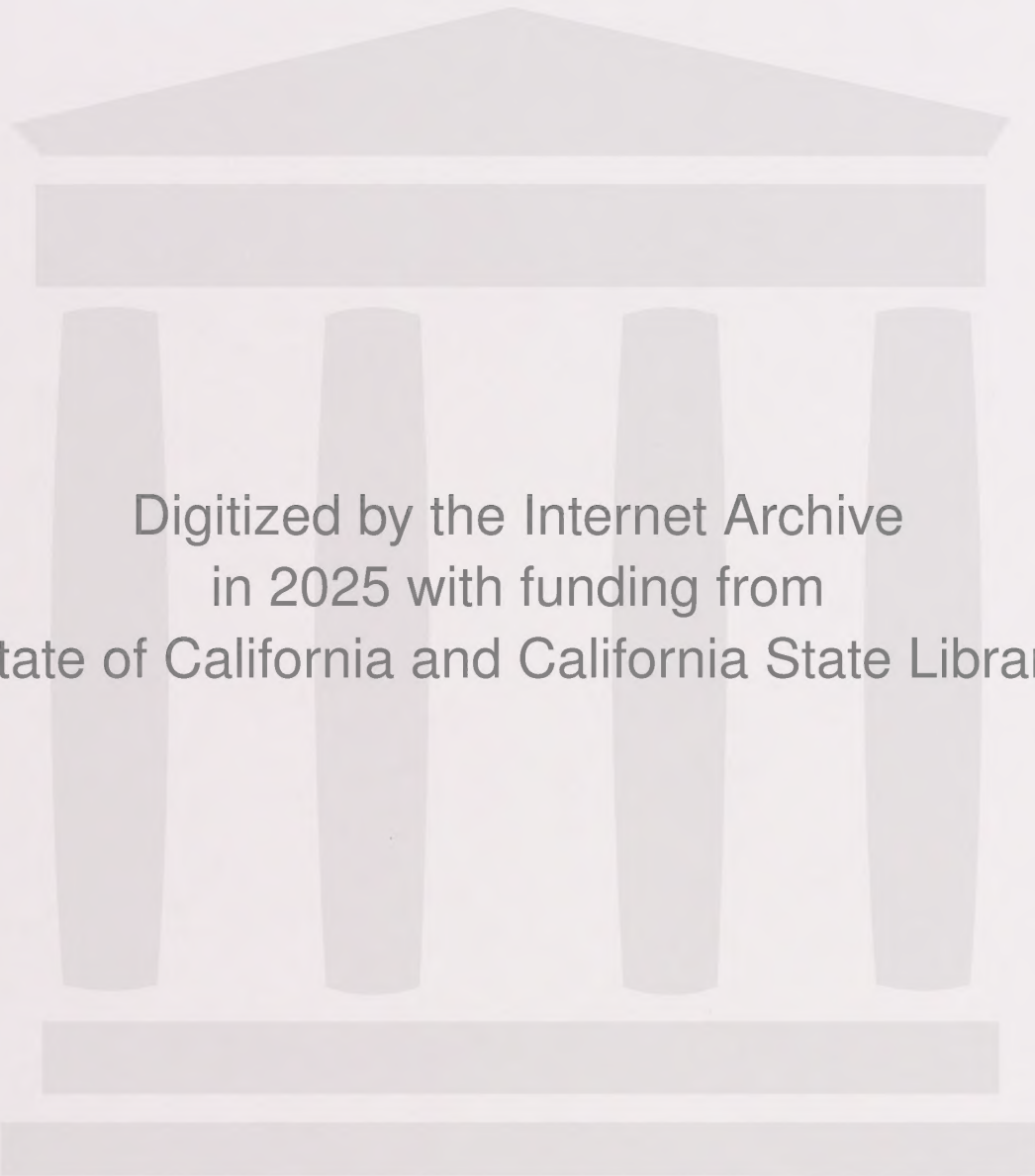
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UNIVERSITY OF CALIFORNIA



Prepared for
Redding Municipal Airport Plan Committee
Shasta County • City of Redding • City of Anderson

Blayney-Dyett, Urban and Regional Planners, San Francisco
Hodges & Shutt, Aviation Planning Services, Santa Rosa
Planning Associates, Redding



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MUNICIPAL AIRPORT AREA PLAN
General Plan Amendment GPA-1-82

July, 1982
April, 1990

Prepared for
Redding Municipal Airport Plan Committee
Shasta County - City of Redding - City of Anderson

Approved by
Redding Planning Commission on July 27, 1982
Redding City Council on November 1, 1982 - Resolution No. 82-185
Amended by Redding City Council on April 3, 1990 - Resolution No. 90-161

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I. INTRODUCTION

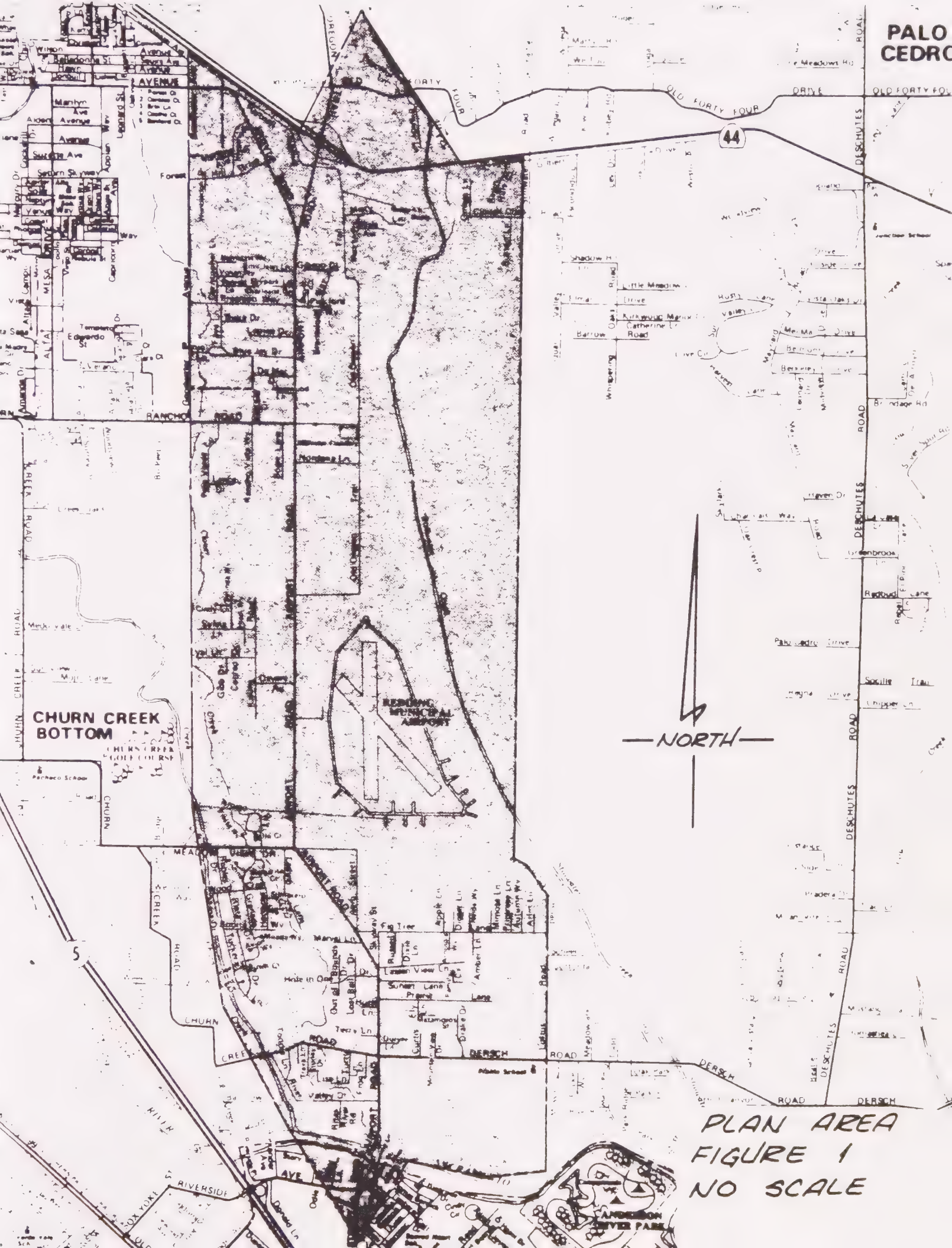
A. BACKGROUND

The Cities of Redding and Anderson and the County of Shasta combined resources under a joint powers agreement to sponsor the preparation of a plan for the Redding Municipal Airport area. The 8,500-acre planning area as depicted on Figure 1 is defined on the north and south by the 55 CNEL (Community Noise Equivalent Level) contour projected for 1995 by the 1976 Redding Airport Master Plan. On the west, the boundary is 2,200 feet west of the 55 CNEL contour and extends to the I-5 Freeway at the Knighton Road interchange from which the main access to the Airport has been planned. The eastern boundary is the north-south extension of the eastern boundary of the Airport property, about 1,800 to 2,500 feet east of the 1976 55 CNEL contour.

Redding Municipal Airport is owned by the City of Redding, but it is within the jurisdiction of the County of Shasta. The planning area includes portions of the spheres of influence of both the City of Redding and the City of Anderson. The City of Redding currently is considering annexation of 3,215 acres of the planning area (Annex No. 80-18, November 1980) between Rancho Road and the Airport, and southeast of the Airport between the Airport and Fig Tree Lane and the Airport property. Shasta County currently is updating the county-wide General Plan. This revision will include the Redding Municipal Airport area at the same level of detail as the rest of the county-wide plan. The City of Redding planning area includes the Airport study area north of Dersch Road. The City's Department of Planning and Community Development is nearing completion of a revised draft General Plan, the first major revision since 1970.

The airport is recognized by all three jurisdictions as a primary element in the transportation system and the economy of the County. Its regional significance extends to Trinity, Siskiyou, Modoc, Lassen, and Tehama counties. Since it is situated in the path of urban expansion and adjoining land is suited for urban development, increasing pressures for development that could conflict with airport use are inevitable. The need to assure compatible adjoining development has resulted in the drafting of Airport Land Use Commission policies in 1978 and revisions of the zoning regulations in 1979 and early 1981. Recognizing that the 1976 Airport Master Plan needed updating and that land-use issues in the environs still were unsettled, the three jurisdictions decided to prepare the Plan. Their intent was to reach agreement on uniform policies for development in the planning area.

The Municipal Airport Plan Committee, consisting of seven members including a Councilman and a Planning Commissioner from each of the two cities, a Supervisor and a Planning Commissioner from the County, and a seventh member appointed by the Committee to represent the public at large were charged with the preparation of the Redding Municipal Airport Plan. In January, the Committee submitted the draft Plan and a draft environmental impact report to the three Planning Commissions with a recommendation to adopt the Plan and to hold joint public hearings.



PALO
CEDRO

CHURN CREEK
BOTTOM

RESERVOIR
MUNICIPAL
AIRPORT

— NORTH —

PLAN AREA
FIGURE 1
NO SCALE

ANDERSON
RIVER PARK

On May 6, 1982, the Planning Commissions of Anderson, Redding and Shasta County recommended certification of the environmental impact report on the Plan. On June 9, 1982, the three Commissions jointly advised their three legislative bodies "that they had agreed upon a Specific Plan for the Airport, with the exception of the Circulation Element, and each agency had the right to go back to their own legislative body in regard to the Circulation Element."

Subsequent to that action, the Shasta County Planning Commission on July 8, 1982, recommended approval of the Plan to the Board of Supervisors. On July 12, 1982, the Anderson Planning Commission recommended adoption of the plan to their Anderson City Council. The one significant difference between the Plan as recommended by the County and the Anderson Planning Commissions was the Airport bypass. The County Plan includes the bypass, the Anderson Plan does not. On July 27, 1982, the Redding Planning Commission recommended approval of the plan with the bypass included.

For the City of Redding, the Plan is the incorporation of an area plan into the Redding General Plan. For Shasta County, the Plan is both a general plan amendment and a specific plan. For Anderson, the plan is a general plan amendment. Major Issues raised during the public-hearing process concerning the Plan included:

1. Traffic and street patterns.
2. The amount and location of industrial land.
3. Protection of private property rights.
4. Noise.
5. Airport operations.
6. Development standards.

The basis for the Plan was five reports prepared by the consulting team of Blayney-Dyett and Hodges and Shutt. Associated with these two firms was the firm of Planning Associates. The reports were as follows:

1. Working Paper No. 1 - Airport Master Plan Update.
2. Working Paper No. 2 - Existing Condition.
3. Working Paper No. 3 - Issues and Options, Alternative Sketch Plans.
4. Draft Specific Plan.
5. Draft EIR.

In addition to these materials, substantial oral and written testimony were submitted by many interested parties and supplementary papers and staff reports were prepared by the staffs of the three agencies together with the final Environmental Impact Report and this document.

In preparing the Plan the consultant used the following methodology:

Review of Federal and State Laws.

Update Aviation Activity Forecasts.

Identify Airport Improvements.

Develop Airport Noise and Safety Guideline.

Review Existing Conditions, Development Constraints, and Development Opportunities.

Review Plan and Development Applications of Each Jurisdiction.

Identify Issues.

Develop Three Alternative Sketch Plans.

Public Input.

Refine the Plan Selected by Committee or a Specific Plan.

Prepare Environmental Impact Report.

From that point on the Plan was subject to the public-hearing process.

B. REGULATORY STATUS

The Municipal Airport Area Plan will serve as a guide for future private and public development in the plan area. Periodic updating of the Area Plan will be necessary as conditions in the area change. Once adopted by the City Council, any addition or deletion from the document will require the Planning Commission and the City Council to follow the same procedures as were used in adopting the Plan originally.

A determination of consistency with the Area Plan will be the same as a determination of consistency with the General Plan. If there is a conflict between the Area Plan and the overall General Plan, the more restrictive standard or policy shall prevail. Through adoption as a general plan amendment, the land-use pattern of the Area Plan is directly incorporated into the land-use map of the Redding General Plan, thereby superseding previous land-use designations for the plan area.

By adopting this Plan, the City has amended its General Plan to include goals, policies, standards and diagrams set forth in the document for the area covered by this Plan. The Plan provides long range goals and proposals together with recommendation and standards for immediate action in the plan area. This Area Plan prepared in conjunction with the County of Shasta and the City of Anderson represents a significant cooperative venture bringing the major interests within the area together for the first time.

The Plan is a positive step taken to realize the full potential of the Plan area in the metropolitan area of the County. Paramount concerns were to protect the Airport, to ameliorate serious circulation problems and to protect public health and safety.

In adoption of the Area Plan, the City of Redding is not adopting the County of Shasta's General Plan nor the City of Anderson's General Plan for the plan area. Rather, the intent of the City is to adopt a plan for the area as nearly the same as can be done in an agreed upon manner with the other two jurisdictions.

While this Plan sets forth many proposals for implementation, it does not establish new regulations or legislation nor does it rezone property. The preparation or amendment of any city ordinances such as zoning, subdivision, housing, building, or other development control must be enacted separately through the regular legislative process. In the absence of such regulations or when already adopted regulations clearly conflict with the Area Plan, the Area Plan shall act as a guide for the development of public and private projects and the making of findings of consistency until such time as new regulations are adopted to implement the Plan. Regulations contained in this Area Plan do not apply outside of the plan area.

C. NATURE OF THE AREA PLAN

As part of the general plan process, a city or county may choose to prepare area plans (also called area general plans, neighborhood plans, or community plans). Area plans, which are not the same as specific plans described in Government Code Sections 65450 et seq., are adopted as part of the general plan in the same manner as elements. They can be adopted for the entire planning area or for only a small portion, as the need arises. Area plans allow specific, local application of jurisdiction-wide policies and create a local forum for resolving conflicts among competing interests. They are extremely useful because they can be used to involve the residents of an area directly in shaping their own community.

Area plans can be used to further the goals and policies of the General Plan. Essentially, area plans are a further refinement of the General Plan and the implementation of its goals, objectives and standards from a general context to a more precise development context. At a minimum, area plans should include the following elements.

1. Location of and standards for land uses and facilities.
2. Locations and standards for streets or other transportation facilities.
3. Standards for population density and intensity and any necessary supporting services.
4. Standards for the conservation, development and use of resources.

5. Provision for implementing the nine mandated General Plan elements.
6. Other appropriate measures.

The Area Plan also is intended to comply with the provisions of Division 9, Part 1, Chapter 4, Article 3.5 of the California Public Utilities Code so that it can be adopted by the Airport Land Use Commission as the Redding Municipal Airport Comprehensive Land Use Plan.

D. ENVIRONMENTAL REVIEW, SIGNIFICANT IMPACTS AND FINDINGS

The Environmental Report on the Plan was found to be adequate by the joint Commissions on May 6, 1982. The EIR contains the draft EIR, the Traffic analysis, written comments from agencies or interested persons, response to comments, a supplementary circulation report and Planning Commission meeting minutes. The City of Redding designation for the Environmental Impact Report was EIR-1-82.

In the final EIR, nine significant impacts were identified; however, a number of these are social impacts. Based on a change in State law effective January 1, 1982, the determination of "significant effect on the environment" is limited to substantial, or potentially substantial, adverse changes in the physical conditions which exist in the area which will be affected by the proposed project, including land, air, water, minerals, flora, fauna, noise and objects of historic or aesthetic significance. It is the opinion of County Counsel that impacts which do not relate to these issues are not required to be addressed in EIRs, and a determination of "significant effect on the environment" is limited to only the issues concerning physical conditions. Accordingly, although the usual scope of issues normally discussed in EIRs has been addressed to determine potential impacts, only significant effects associated with the above-referenced issues has been determined to constitute a "significant effect on the environment."

There were then four remaining items of impact on the environment listed in the final EIR. These are the conversion of agricultural lands, noise impacts from traffic, potential for increased air pollutants, and adverse impacts on soils in terms of stream sedimentation and stream or ground water pollution. The following is a list of impacts, proposed findings and facts associated with the findings:

Impact No. 1:

660 acres of land currently used for agriculture will be converted to urban land uses over a period of more than 20 years.

Findings: Mitigation measures have been incorporated into the Area Plan which mitigate the loss of agricultural land; however, these measures will not reduce this impact to an insignificant level.

Facts:

1. Large lot zoning can be applied to the majority of those parcels that have current agricultural potential until the lands are converted to

the more intense land uses forecast by the Plan. This option is listed as Policy 5t of the Plan.

2. The existing agricultural designations for that portion of Churn Creek Bottom which is included in the plan area will not be changed by the Plan. Thus, any agricultural potential for those more fertile lands remain unchanged.
3. Ultimate maximum densities and uses require public water and sewerage systems which are not now present in the plan area. Such systems will not be available in the near future and may not be available for some area of the Plan in the determinable future. Consequently, the immediate conversion of all lands with agricultural potential located in the plan area is not possible. The conversion of agricultural lands will be a gradual process, thus allowing continued production. Those designations of the Plan, which affect current agricultural lands, such as Policy 5p, expressly provide for accommodation of current and future desired agricultural activities as permitted uses. In addition, lands east of Stillwater Creek are designated for larger parcels, which provides for continued agricultural options.
4. Land owned by the Airport operator but unnecessary for Airport operation will likely continue to be managed in an agricultural manner.

Impact No. 2

The high vehicular traffic volumes predicted will cause noise impacts on lands adjacent to high capacity roads. Mitigation will require changes in regulations to require setbacks, noise barriers and noise insulation.

Findings: Mitigation measures have been incorporated into the Area Plan which mitigate the noise impacts associated with traffic as identified in the final EIR; however, these measures will not reduce this impact to an insignificant level.

Facts:

1. Design criteria set forth by Policies 2h, 4a, 4b, 5h, 5j, 5l, and 5p, applies specifically to design techniques intended to reduce noise impacts as well as visual effects of high intensity uses established next to residential zones or adjacent to major traffic ways.
2. The Plan forecasts those land-use types and densities along major traffic ways that are either more noise tolerant than other uses or which, with the use of design criteria, can be made compatible.

Impact No. 3

Projected increases in vehicular traffic, and in industrial and construction activity may result in an increased concentration of air pollutants.

Findings: Mitigation measures have been incorporated into the Specific Plan, which mitigate the air quality impact as identified in the final EIR; however, these measures will not reduce this impact to insignificant levels.

Facts:

1. For regulated projects the standards of the Shasta County Air Pollution Control District must be met as listed by Policy 5p.
2. The Plan utilizes and builds upon the existing residential communities established in Anderson and in the Enterprise area by providing work centers around the Airport that will reduce the amount of travel necessary and therefore reduce vehicular pollutants that might otherwise be generated if persons had to travel to other work centers in the valley.
3. The street standards for all new roads within the study area depict paving as the surface material which will reduce particulates normally attributable to unpaved roads.
4. State or Federal mandated air pollution control equipment on air and ground vehicles should help reduce overall air degradation.
5. An adequate circulation system should reduce congestion, reduce travel distances and overall vehicle pollution.
6. It is anticipated that a public transportation system will be extended to the area as density increases.

Impact No. 4:

Adverse impacts such as soil erosion, stream sedimentation and stream and ground-water pollution could occur if development in the plan area were to continue to rely on the area's natural drainage.

Findings: Mitigation measures have been incorporated into the Specific Plan, which mitigate the drainage impact as identified in the final EIR; however, these measures will not reduce the impact to insignificant levels.

Facts:

1. The drainage channels of Clover Creek and Stillwater Creek will be recognized by the Plan.
2. Street standards call for incorporation of curbs and gutters and drainage works to adequately carry off-site and drainage waters.
3. Ultimately, a master drainage study and drainage plan will have to be developed to address the subject of an urban drainage system before the area is developed in an urban theme.

In adopting the Plan, it is the declaration of the Redding City Council, that:

1. Mitigation measures have been incorporated into the Area Plan and, therefore, the General Plan amendment, which mitigates the significant agricultural lands, traffic noise, air pollution and drainage impacts as identified in the final EIR; however, these measures will not reduce these impacts to insignificant levels.
2. Specific economic, social or other considerations make infeasible the project alternatives as identified in the final EIR in that:
 - a. In view of the technical data developed by the Plan regarding noise and air safety, Alternative No. 1 is overly conservative and unnecessarily restrictive in nature.
 - b. Alternative No. 1 places severe and financial burdens on the City or Airport operator by requiring that nearly seven times the amount of land designated for acquisition by the other alternatives be purchased under this alternative.
 - c. Alternative No. 2 would not comply with noise standards mandated by the State of California and would subject a larger resident population to a noisy environment.
 - d. Alternative No. 2 would establish the largest resident population of all the Plans, thereby building potential for inherent long-term land-use conflicts.
 - e. Alternative No. 3 utilizes the large-lot agricultural designation for lands that, although they may have a soil capability of Class II, have low fertility; as a consequence, the cost of production is high and other more suitable lands outside the plan area are being used to continue growing of the high value, capital intensive crops formerly associated with the plains.
 - f. The conversion of agricultural lands is already occurring. The high cost of agricultural activity in this area does not justify an agricultural designation if airport and community related land-use concerns can be adequately addressed by the use of land-use designations other than "agricultural."
 - g. Although feasible, the alternatives do not substantially alter the total level of environmental impact.

As "statements of overriding considerations" for the unavoidable significant effects on the environment regarding agricultural lands, traffic noise, air pollution and drainage impacts, the City Council finds the following to be in evidence:

1. That the Plan addresses safety and noise, land use, circulation and public facility concerns and will provide the guidance necessary to ensure that development in the Airport planning area will be compatible with and supportive of the Airport function and will maximize its

contribution to the growth and development of Redding, Anderson and Shasta County and will protect the health and safety of present and future residents and property owners within the planning area.

2. That the current General Plan does not address in sufficient detail the concern for long-term operational capability of the Airport nor the desire to adequately provide for and yet protect future residents and other property users.
3. That the Plan will safeguard the Airport from intrusion by uses that could limit the expansion of air service to Redding, Anderson, Shasta County and the Northern California region by recognizing the vital service provided by the Airport and the need to maintain a level of operation necessary to satisfy existing and future aviation requirements of the user communities.
4. That the Plan is designed to prevent development that could lead to safety problems for air travelers and persons residing or working in the Airport environs.
5. That the Plan will permit persons who live, work and own property near the Airport to enjoy a maximum amount of freedom from noise and other impacts generated by the operation of the Airport.
6. That the Plan will comply with Airport noise standards mandated by the State of California and will ensure a development pattern that is compatible with airport-generated noise.
7. That the Plan will protect the public investment in the Airport, a facility for which there is no feasible replacement.
8. That the Plan will recognize the Airport's role as a major entry point for the Cities of Redding and Anderson and Shasta County, and protect and enhance the appearance of the Airport area.

E. OBJECTIVES

The major objectives of the Municipal Airport Area Plan are:

1. Safeguard the Airport from intrusion by uses that limit the expansion of air service to Redding, Anderson, Shasta County, and the Northern California region by recognizing the vital service provided by the Airport and the need to maintain a level of operations necessary to satisfy existing and future aviation requirements of the user communities.
2. Prevent development that will lead to safety problems for air travelers and persons residing or working in the airport environs.
3. Permit persons who live, work, and own property near the Airport to enjoy a maximum amount of freedom from noise and other impacts generated by the operation of the Airport.

4. Comply with Airport noise standards mandated by the State of California and ensure a development pattern that is compatible with airport-generated noise.
5. Protect the public investment in the Airport, a facility for which there is no feasible replacement.
6. Recognize the Airport's role as a major entry point for the Cities of Redding and Anderson and Shasta County, and protect and enhance the appearance of the Airport area.
7. Provide sufficient development opportunities for airport-related uses, including those which offer goods and services to air travelers and those which benefit from the proximity to the passenger and air cargo service provided by the Airport.
8. Comply with the operational and safety requirements of the Federal Aviation Regulations.

F. ASSUMPTIONS

The Area Plan is based on a projection of a 160 percent increase in commercial air passengers enplaned during the next 20 years and on a shift to new technology aircraft. However, the rate of growth of Shasta County's South Central Region (SCR) and the availability of wastewater disposal systems will be more important determinants of development within the planning area than air travel growth.

The planning area represents 15 percent of the SCR's land having moderate to very high suitability for urban development as defined for the County's General Plan revision program. In 1980, the study area population consisted of about 3,250 residents in unincorporated Shasta County and about 650 in the City of Anderson. The Area Plan assumes an annual growth rate in the SCR of three to four percent--comparable to the assumptions used by Shasta County and Redding in revising their General Plans. If these growth rates apply in the planning area, it will not be fully developed during the next 20 years; however, the development that will take place will set the pattern for development after year 2000.

All sewage in the unincorporated portion of the study area currently is treated by individual septic systems. The Ott report, "Redding Airport Area Wastewater Alternatives, 1980," contains a thorough analysis of eight alternative systems leading to a conclusion that the best long-run solution is construction of a new treatment plant without construction of lift stations.

The Area Plan will require sewers in most or all of the planning area west of Stillwater Creek if the uses and densities proposed are to be fully developed. The cost will be substantial and will be borne by development through formation of one or more assessment districts. Lack of sewers and the economy is likely to slow development in the years immediately ahead, but once sewers are available, growth will be rapid because similarly served land elsewhere in the metropolitan area likely will be scarce and the burden of sewer assessments on undeveloped land will be high.

In summary, the major assumptions made in order to prepare this plan were as follows:

1. Airport aircraft operations will increase by 134 percent.
2. The plan area will grow and will become more urban.
3. The area will be served by sanitary sewers.
4. There is a need to develop industrial land in the South Central Region of Shasta County.
5. The Airport needs to be protected from incompatible development.
6. The Airport is a needed regional facility that is expensive to relocate.
7. Alone, the City of Redding does not have the resources to protect the Airport.
8. There will be 13 near-airport aircraft accidents within the next twenty years.
9. Impacts from urbanization of the area can be mitigated to a reasonable level.

In addition, the State Division of Aeronautics, in its comment on the draft environmental impact report, made the following statement which is pertinent to the objectives of the Plan.

"Residential developments in the area should be discouraged as they inevitably lead to attempts to coerce curtailment of operations at the airport, or close the airport. Existing residences should not be allowed as a precedent for further residential development."

II. AREA PLAN DESCRIPTION AND POLICIES

A. AIRPORT DEVELOPMENT AND OPERATIONS

Airport development policies are based on the findings of Working Paper No. 1 (Airport Master Plan Update) and are summarized below:

- A 134 percent increase in total aircraft operations between 1980 and 2000 is projected as illustrated on Table No. 1:

TABLE 1
AVIATION FORECAST SUMMARY

	<u>1980</u>	<u>1985</u>	<u>1990</u>	<u>2000</u>
<u>Enplaned Passengers</u>				
Airline	53,000a	77,000	97,000	134,000
Commuter	9,000a	13,000	18,000	26,000
Total	<u>62,000</u>	<u>90,000</u>	<u>115,000</u>	<u>160,000</u>
<u>Based Aircraft</u>				
Shasta County	316	400	480	600
Redding Municipal Airport	140	180	230	300
<u>Aircraft Operations</u>				
Airline	4,225	4,600	5,000	6,000
Commuter	2,320	4,800	5,200	5,800
General Aviation Local	27,488	35,000	43,000	55,000
General Aviation Itinerant	53,611	75,000	102,000	140,000
Total General Aviation	<u>81,099</u>	<u>110,000</u>	<u>145,000</u>	<u>195,000</u>
Military	1,039	1,000	1,000	1,000
Total Aircraft Operations	<u>88,683</u>	<u>120,400</u>	<u>156,200</u>	<u>207,800</u>

^a1979 figures rounded

Source: Hodges & Shutt, Aviation Planning Services

See Working Paper No. 1 for forecast method and assumptions

- The two air carriers serving Redding, Republic Airlines and Frontier Airlines, expect to continue using twin-engine, turbo-fan aircraft. Their fleets are almost entirely DC-9s and Boeing 737s, and all orders for new equipment are for new technology (quieter, more fuel efficient) aircraft.
- The main runway (Runway 16-34) is of adequate length to accommodate existing demands and those that realistically can be projected. Assuming a stage length of 800 nautical miles (encompassing Denver, Los Angeles, and Seattle), the existing 7,000-foot runway is adequate for 737s and DC-9s on a 100°F day.

- Based upon the projections of air traffic movements prepared for the Area Plan and the capacity of the airfield system as defined in the 1976 Master Plan, a parallel runway will be required to accommodate light aircraft training movements in the forecast period, 1995-2000 (see Figure 2).
- The role of Runway 12-30 (5,077 feet) is to provide crosswind coverage and to improve overall Airport capacity. Current plans call for lengthening to 6,500 feet and strengthening to allow its use by heavy fire attack aircraft and as a backup runway for the airlines when Runway 16-34 is inoperative.
- There are properties off the ends of Runway 16-34 that are significantly affected by Airport activity and are eligible for acquisition under Federal aid programs.
- Approximately 110 acres of Airport property west of Airport Road is considered surplus to aviation needs. The Federal Aviation Agency (FAA) has indicated that this property could be released from aviation commitments, which would allow the City to sale or lease it if the revenue is spent on grant-eligible Airport improvements within five years. This offers a logical method of financing land acquisition in the approaches to Runway 16-34.
- Redding Municipal Airport's State Airport Permit has no attached conditions or indicated variances to State and Federal safety-related dimensional standards, including clear zone ownership, building setback requirements, etc.
- Noise contours were plotted using 1981 noise measurements. The 55 CNEL contour cannot be accurately determined and is not needed for regulation, so no attempt was made to map it. Projections of the year 2000 noise environment were prepared using assumptions about the number of flights by type of aircraft and time of day (see Figures 3 and 4). The area of noise impact caused by jet aircraft will be smaller in 2000 than it is in 1981 because future airline and business jet aircraft will be substantially less noisy than current models.
- Noise levels are expected to increase at the southeast end of Runway 12-30 as a result of increased use by nonjet aircraft. Noise at the northwest end of this runway will not increase because it rarely is used for either takeoffs or approaches due to the long taxi distance to or from the southeast corner of the Airport.
- The impact of a parallel runway on off-airport land use will be insignificant since the noise impact will be engulfed in that of Runway 16-34 and no significant new flight tracks will be required to service the runway. A parallel runway at Redding Municipal Airport may be beneficial in ultimately diverting traffic from Benton Field, where off-airport conflicts may arise in the future.

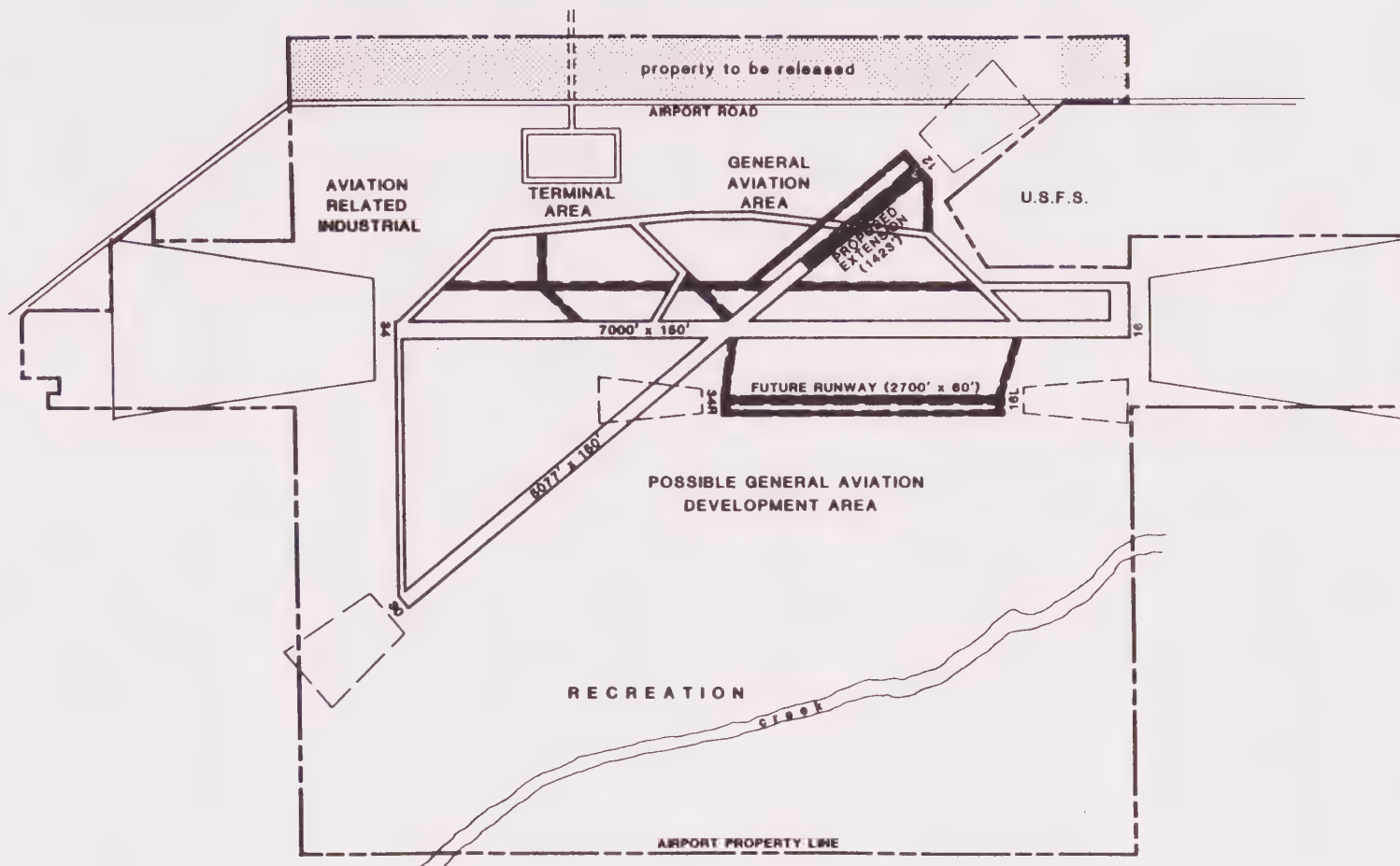
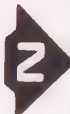


Figure 2.

AVIATION PLANNING SERVICES



0 400 800 1200
FEET



AIRPORT DEVELOPMENT
SCHEMATIC

Based upon the previous conclusions regarding future growth of aviation activity, the following Airport development policies are recommended:

- 1a. Sell or lease Airport property west of Airport Road and apply proceeds to purchase of property in the approach areas to Runway 16-34 (see Figure 2).
- 1b. As funds permit, acquire, clear, and retain properties shown on the plan north of Fig Tree Lane and five parcels fronting on Skyway Street, including the Anderson Grange.
- 1c. As funds permit, construct a 2,700-foot parallel runway 700 feet east of Runway 16-34 late in the forecast period (1995-2000) to accommodate light aircraft training movements (see Figure 2) and general aviation aircraft.
- 1d. As funds permit, crosswind runway 12-30 should be lengthened to 6,500 feet and strengthened to allow its use by heavy fire attack aircraft and to allow it to serve as a backup runway for the airlines when the main runway is inoperative (see Figure 2).
- 1e. Develop airport-related commercial uses including restaurants, motels, car-rental agencies, and aviation services on leasehold sites or Airport property on the east frontage of Airport Road.
- 1f. Evaluate Airport operations and air-traffic patterns regularly to determine the impact of Airport operations on surrounding land uses and where practical determine appropriate changes in Airport operations to minimize impacts.

It should be noted that among the requirements a local agency must meet to obtain Federal funds for airport improvements are airport/land use compatibility. As a condition to the receipt of ADAP funds, the airport owner must, among other things, give assurances regarding land uses in the airport environs that:

1. The aerial approaches to the airport will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards.
2. Appropriate action, including the adoption of zoning laws, has been or will be taken to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft.

B. NOISE

Aircraft noise has become the dominant airport issue in the environs of virtually all airports in California's larger metropolitan areas. A primary reason for preparation of the Area Plan is to avoid this problem in the Redding area. Noise complaints currently are only occasional, but noise potentially could become a major nuisance for some residents of areas currently designated for residential use.

California Airport Noise Standards (California Administrative Code, Title 21, Sections 5000 et seq.) define the level of noise acceptable to a reasonable person residing in the vicinity of any airport as community noise equivalent level (CNEL) value of 65 dB. Section 5005 (c) states that "This criterion level has been chosen for reasonable persons residing in urban residential areas where houses are of typical California construction and may have windows partially open. It has been selected with reference to speech, sleep, and community reaction." Section 5012(b) reads "Giving due consideration to economic and technological feasibility, the criterion CNEL for existing civilian airports is 70 dB until December 31, 1985 and 65 dB thereafter.

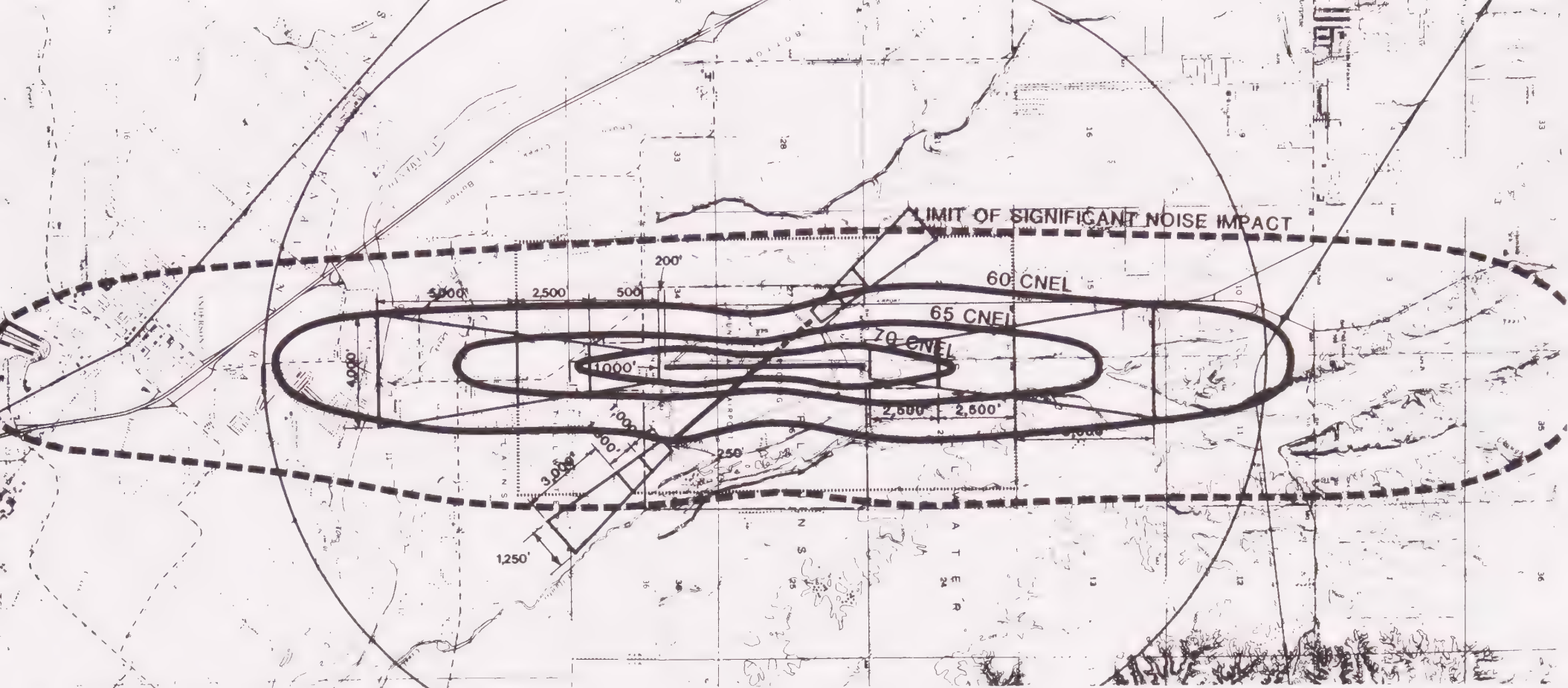
Federal "Guidelines for Considering Noise in Land Use Planning and Control"² discourage residential use within the 65 CNEL contour, stating that "The absence of viable alternative development options should be determined and an evaluation indicating that a demonstrated community need for residential use would not be met if development were prohibited in these zones should be conducted prior to approvals."

Within the 65 CNEL contour, there currently are 2 churches, the Anderson Grange, 59 single-family homes on foundations and 15 mobile homes. Although the area of impact will be less in the year 2000 than it is in 1981, significant changes are not expected until near the end of that period when virtually all of the older, noisier aircraft have been retired. Consequently, the Area Plan map shows the composite 1981-2000 60 and 65 CNEL contours. These contours bound the maximum area subject to each noise level within the projection period.

California Noise Insulation Standards (California Administrative Code, Title 25, Section 28) are applicable to new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings. These standards require interior CNEL with windows closed to be 45 dB or less in any habitable room. They also require new residential structures (excluding single-family detached units) within the 60 CNEL contour to have an acoustical analysis showing that the structure has been designed to limit intruding noise to the prescribed level. This law does not take into consideration regional climatic conditions that cause residents either to open windows or consume large amounts of energy for air conditioning nor does it address the problem of modifying the acoustical properties of existing residential structures within the 60 CNEL contour.

Funds for Purchase of Noise-Impacted Properties. FAA grants may be used to acquire land within the current or projected 65 CNEL contour, but Redding would not be high enough on the priority list to qualify, given current funding levels. However, the FAA would agree to the sale of 110 acres of surplus Airport property west of Airport Road if the revenue were used for grant-eligible Airport improvements within five years. Assuming sale at \$25,000 per acre, \$2.75 million could be raised. Land purchased with these funds could be leased to compatible uses, but approval for sale may be difficult to obtain.

²Federal Interagency Committee on Urban Noise, June 1980.



Aircraft Mix	Total Operations Average Day	Runway Utilization								Time of Day		
		Takeoff				Landing				Day	Evening	Night
		16	34	12	30	16	34	12	30	(0700-1900 hours)	(1900-2200 hours)	(2200-0700 hours)
DC-9/737	14	40%	60%	—	—	40%	60%	—	—	78%	15%	7%
Business or Military Jet	6	40%	60%	—	—	40%	60%	—	—	84%	16%	—
4-engine propeller	4	60%	40%	—	—	25%	75%	—	—	75%	25%	—
2-engine propeller: heavy	2	60%	40%	—	—	25%	75%	—	—	75%	25%	—
2-engine propeller: light	30	28%	42%	30%	—	32%	48%	2%	18%	84%	14%	2%
1-engine propeller	218	26%	39%	34%	1%	30%	45%	3%	22%	86%	12%	2%

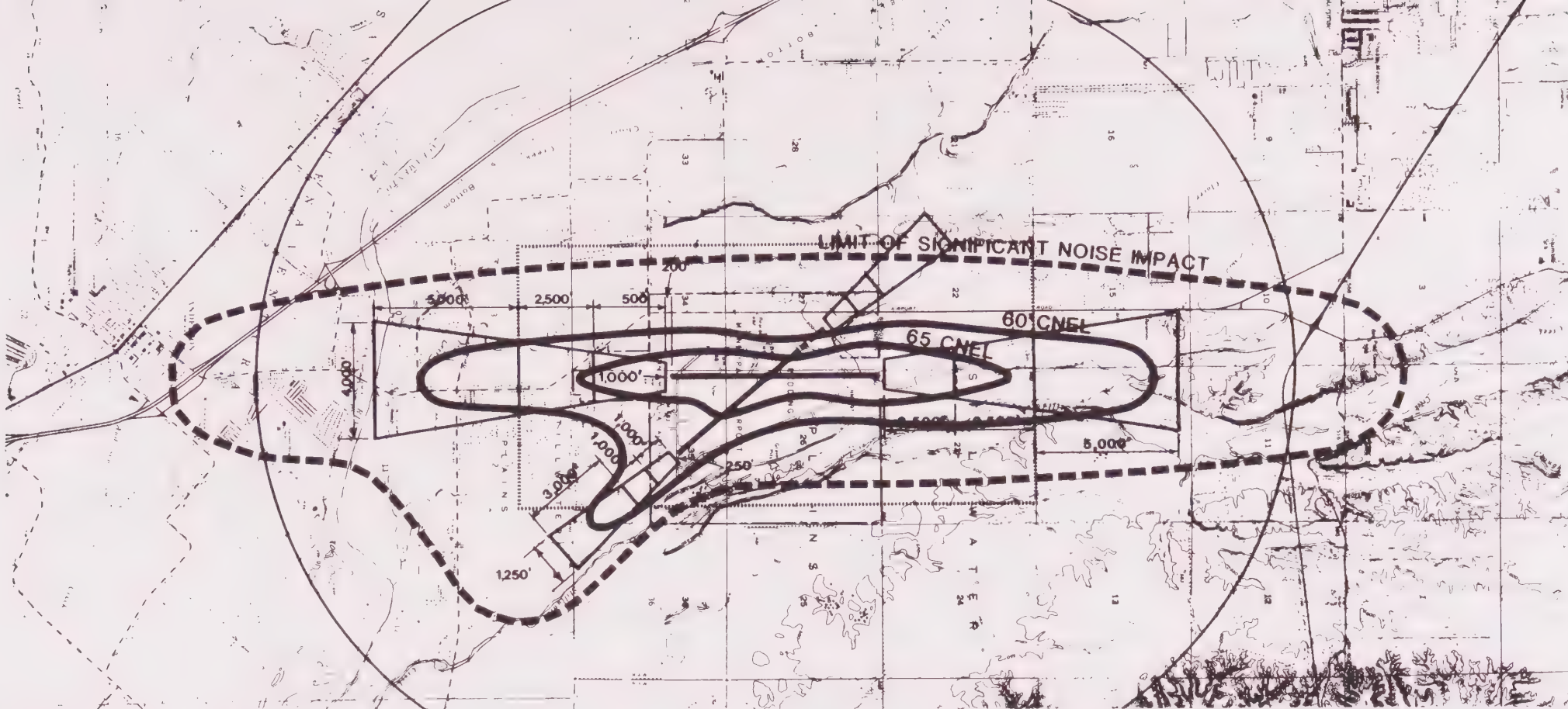
- 1/ Primarily U.S. Forest Service and California Division of Forestry fire attack aircraft. Total operations figures represent average day of 4-month fire season.
- 2/ No night operations on Runway 12-30.

Figure 3. NOISE IMPACT AREA - 1981



0' 4000'





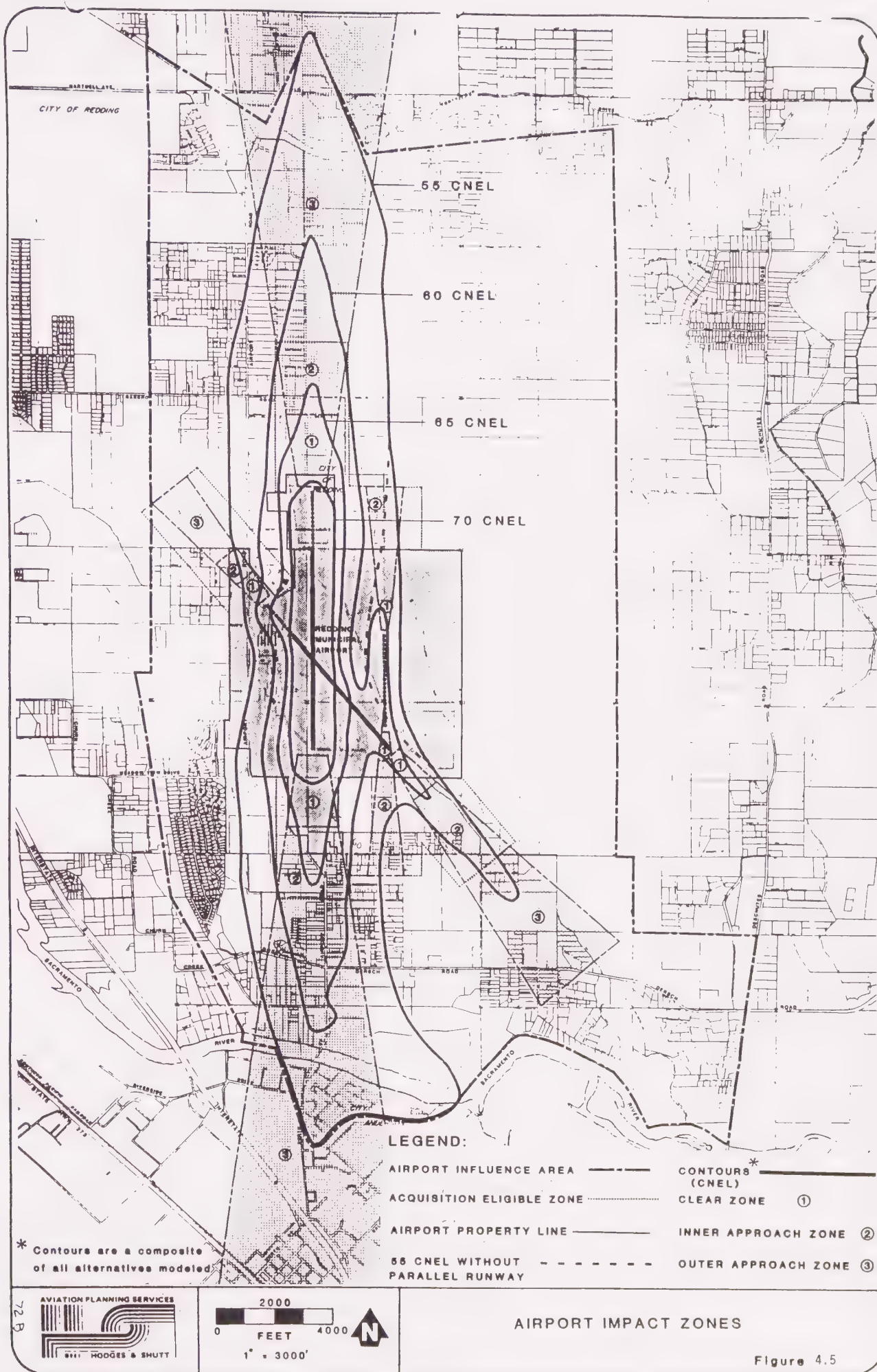
Aircraft Mix	Total Operations Average Day	Runway Utilization								Time of Day			Notes
		Takeoff				Landing				Day (0700-1900 hours)	Evening (1900-2200 hours)	Night (2200-0700 hours)	
		16	34	12	50	16	34	12	50				
DC-9/737	19	40%	60%	—	—	40%	60%	—	—	78%	15%	7%	1/ Primarily U.S. Forest Service and California Division of Forestry fire attack aircraft. Total operations figures represent average day of 4-month fire season. 2/ No night operations on Runway 12-30. NOTE: 70 CNEL contour remains within 200 feet of runway.
Business or Military Jet	30	34%	51%	15%	—	36%	54%	1%	9%	81%	17%	2%	
4-engine propeller	4	48%	32%	20%	—	30%	45%	—	25%	75%	25%	—	
2-engine propeller: heavy	2	45%	30%	25%	—	28%	42%	—	30%	75%	25%	—	
2-engine propeller: light	73	28%	42%	30%	—	32%	48%	2%	18%	82%	15%	3%	
1-engine propeller	250	26%	39%	34%	1%	30%	45%	3%	22%	84%	13%	3%	

Figure 4. NOISE IMPACT AREA - 2000



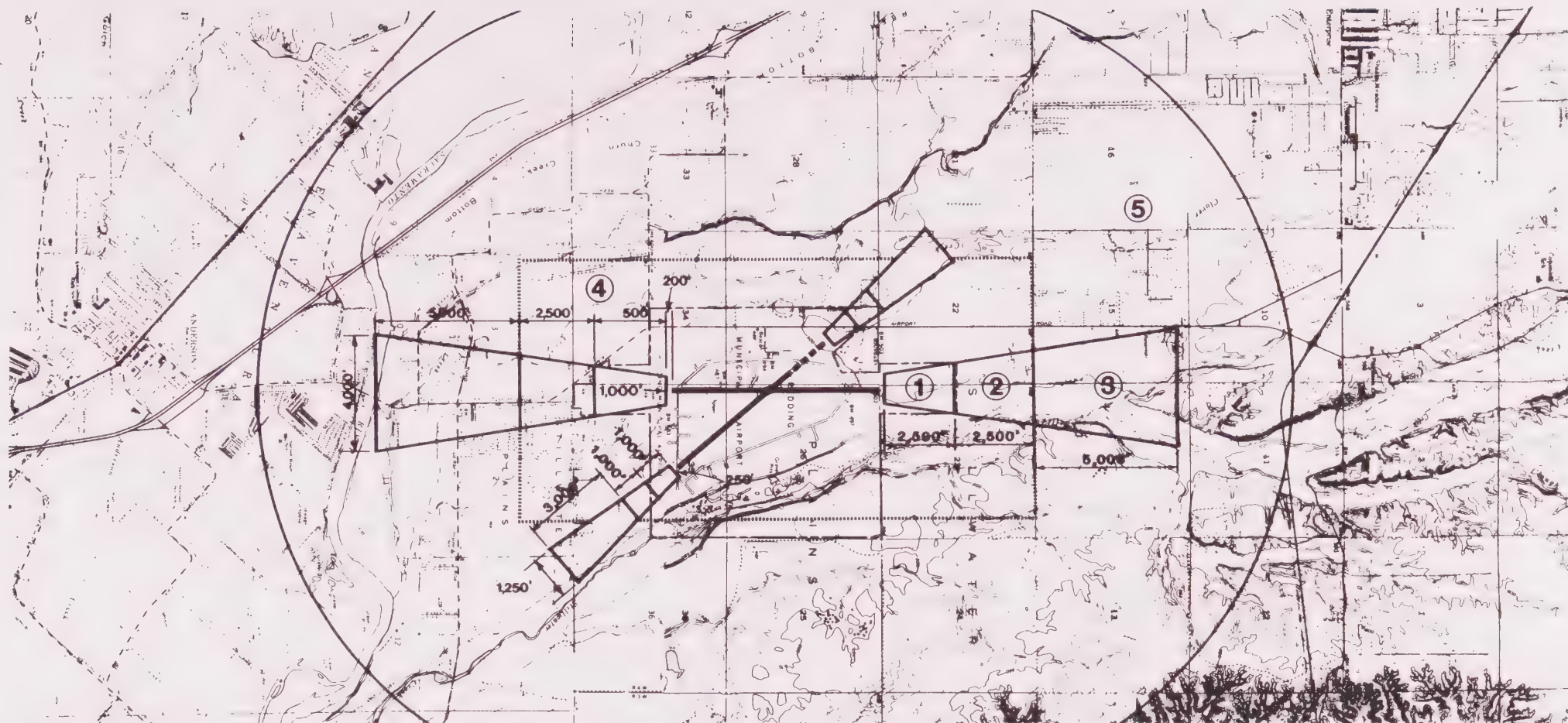
0 4000'





Policies

- 2a. Designate certain land developed with incompatible uses within the south Inner Approach Zone, as shown on the Area Plan, for Airport acquisition as availability of funds permits. The designation of "Acquisition" is made based on the concerns of noise impact and safety and the potential for conflict between airport operations and future users of the affected properties.
- 2b. Designate land within the 1981-2000 60 CNEL contour as identified on Figure 14 of the Part 150 Study and Figure 4.5 of the Area Plan for nonresidential use in order to attain consistency with noise standards of the Redding General Plan and Shasta County General Plan.
- 2c. Notify owners of developed residential property within the designated airport acquisition area and the designated industrial area subject to the 60 CNEL as identified on Figure 14 of the Part 150 Study and Figures 4.5, 5.5, and 5.6 of the Area Plan of the City of Redding's willingness to purchase, subject to availability of funds, requesting first refusal purchase opportunity.
 - Priority: 1. Residential units on Skyway Street and Fig Tree Lane sites designated to be acquired and retained as airport property.
 - 2. The Anderson Grange and residential units adjacent to the Anderson Grange and land north of the runway necessary to permit extension of the primary runway.
 - 3. Two residential areas south of the Airport and one designated industrial area north of the Airport as depicted on Figures 5.5 and 5.6.
- 2d. If the number of owners wishing to sell exceeds the funds available, a priority list should be established and should remain in force until all properties receiving priority 1, 2, 3, or 4 on the initial list have been acquired or converted to a compatible use, or the request to purchase has been withdrawn.
- 2e. Property acquired that is not designated for retention as airport property should be resold or leased for a compatible use, subject to conservation easements and/or aviation easements where appropriate.
- 2f. Require noise agreements as a condition of use permit, subdivision, or parcel map approval within the projected 60 CNEL contour (shown on the Area Plan map) and within the Traffic Pattern Zone (shown on Figure 5). The agreements should preclude suits for damages or suits to enjoin airport operations to limit noise and should run with the land.
- 2g. Require construction of walls and/or berms as depicted on Figure 6 adjacent to freeways and expressways in residential areas to mitigate noise impacts where CNEL noise levels will exceed prescribed State standards.
- 2h. Acquire conservation easements and aviation easements where feasible in areas identified on Figures 5.5 and 5.6.
- 2i. Develop an affirmative and effective buyer awareness program to make the public aware of aircraft overflights.
- 2j. Require deed notices for all future subdivisions within the airport influence area which state that the property is within the Redding Municipal Airport influence area and is subject to overflights by aircraft.



0' 4000'



1 - Clear Zone

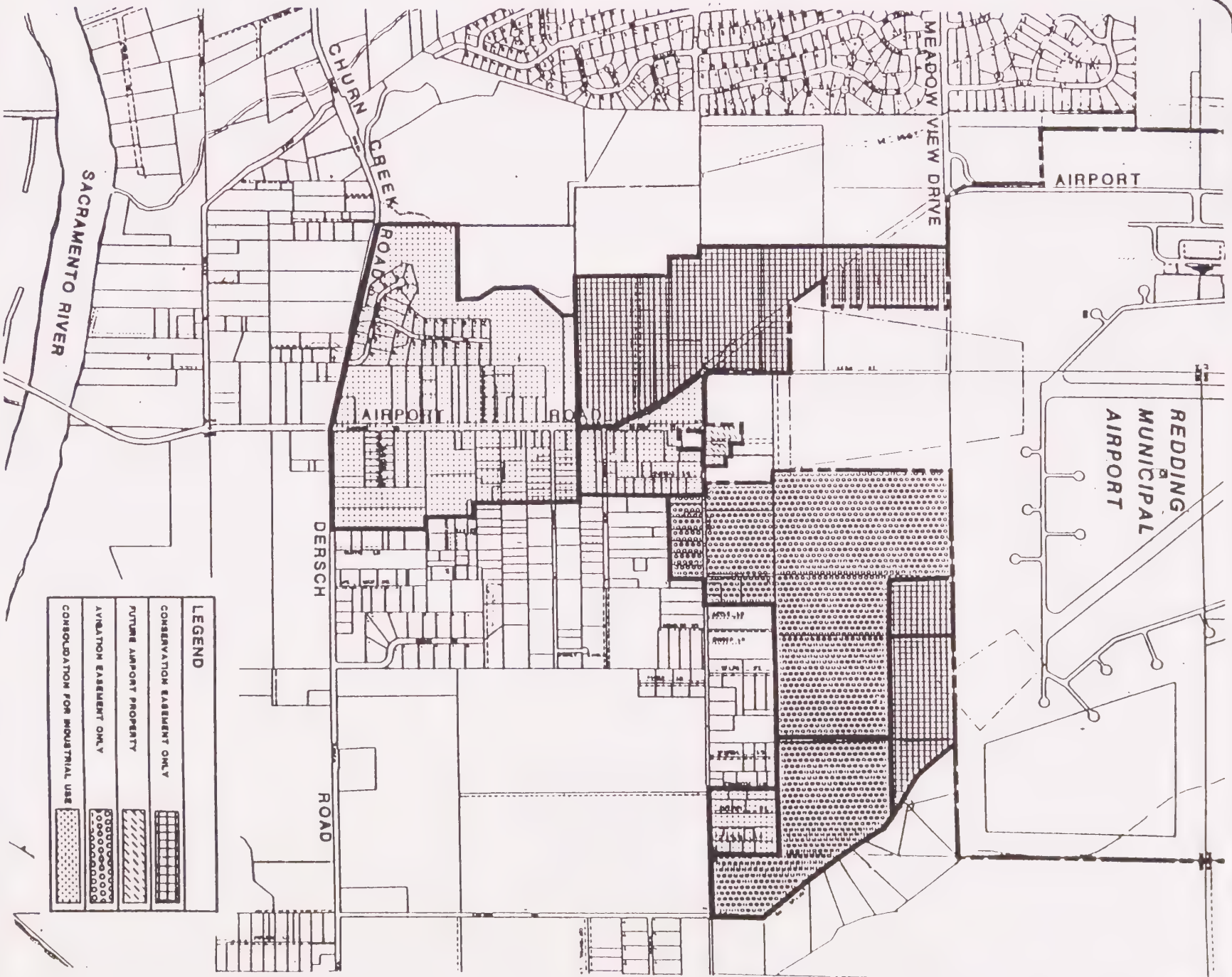
2 - Inner Approach Zone

3 - Outer Approach Zone

4 - Traffic Pattern Zone

5 - Horizontal and Conical Zones

Figure 5. SAFETY ZONES



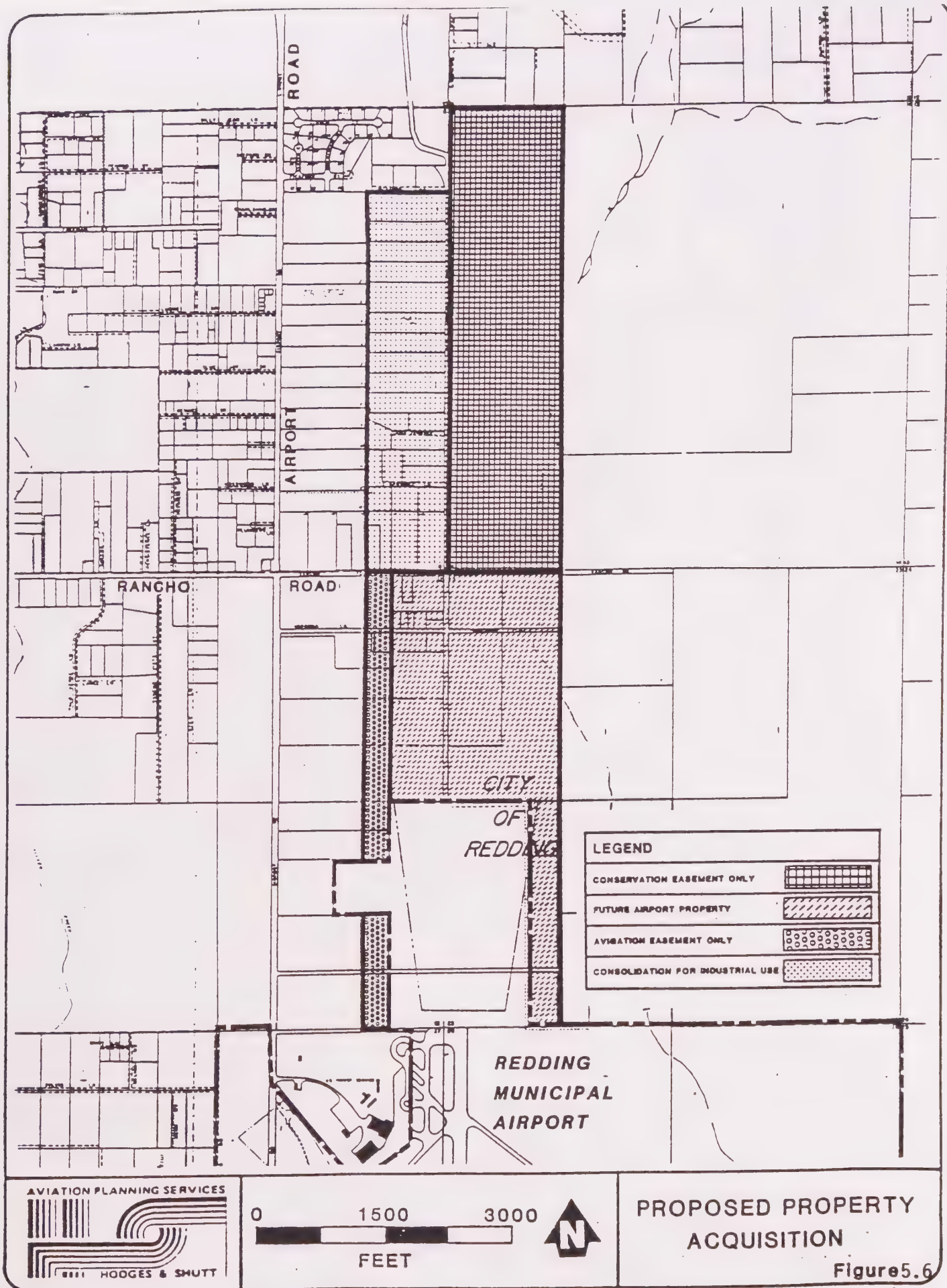
AVIATION PLANNING SERVICES
HOOGES & SHUTT

0 1500 3000
FEET



PROPOSED PROPERTY
ACQUISITION

Figure 5.5



C. SAFETY

National Transportation Safety Board data on all serious general aviation accidents in the U. S. during the five-year period from 1974 through 1978 indicates that nearly 50 percent of such accidents took place on an airport, that another 30 percent occurred en route (beyond five miles from an airport), and that only 20 percent were "near airport." Of the "near airport" accidents--there were some 4,600 in the five-year period--the majority (63 percent) were within the traffic pattern or one-half mile of an airport; and as the distance increased, the frequency decreased. During the same five-year period, an estimated 1.02 billion general aviation aircraft operations were conducted. Statistically, therefore, one "near airport" accident can be expected for approximately every 220,000 aircraft operations. In the five-year period, only 14 "near airport" aircraft accidents (an average of three per year nationwide) resulted in deaths to people on the ground. A total of 21 nonaircraft occupants (approximately four per year) died in these accidents.³ By comparison, National Safety Council data indicates that for the period from 1970 through 1978, some 1,000 people (an average of 111 per year) died from lightning strikes.

Relating these numbers to forecast aircraft activity levels at Redding Municipal Airport, 13 "near airport" accidents can be expected within the next 20 years. The expanse of the Redding Airport property, however, points to an incidence of "near airport" accidents substantially lower than this figure. Most general aviation airports have runways only one-third to one-half as long as Redding's 7,000-foot primary runway; and many have property lines as close as 200 feet to the runway ends, compared to as much as 3,400 feet at Redding. An aircraft taking off, having engine failure, and making an emergency landing a mile beyond the runway end at a small airport could still be on Airport property at Redding.

Policies

- 3a. Land use and density regulations should be in accord with the criteria in Table 2.
- 3b. To maintain the ability to provide open areas that could be used for an emergency landing, no parcels smaller than five acres should be created within the Inner Approach Zone; and no nonresidential parcels smaller than five acres should be created within the Outer Approach Zone. In the area outside the Inner Approach Zone designated "Clustered Low Intensity," the minimum parcel size shall be 5 acres unless the parcels are created as part of a single parcel map totaling 15 or more acres and with the building pad areas identified on the Final Map. These limitations affect new industrial parcels and do not unduly limit the choice of parcel sizes within the Airport environs. Residential parcel sizes in the Outer Approach Zone, as designated on the plan, are consistent with existing development and are large enough to allow maintenance of open areas for safety.
- 3c. Designate for acquisition those properties identified on Figures 5.5 and 5.6. When a development application is filed for property wholly or partially within the identified area, the affected public agency(s) shall, within 90 days of the date of filing, determine whether all or part of the development rights of the land area shall be acquired. If the acquisition

³ This figure does not include the seven nonoccupant fatalities that resulted from the September 1978 crash of a Boeing 727 in San Diego following a midair collision with a general aviation aircraft.

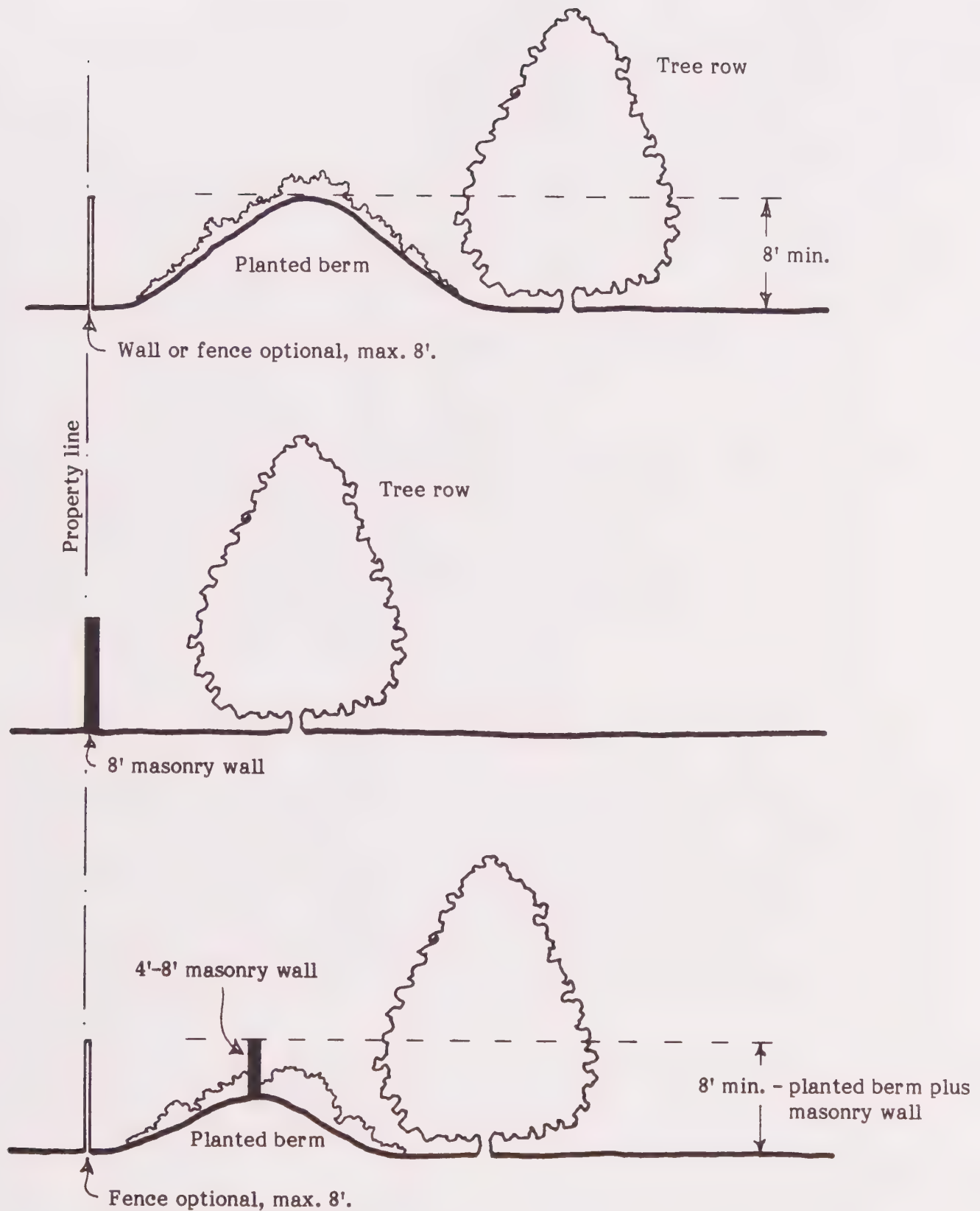


Figure 6. ALTERNATIVE BUFFERING REQUIRED FOR A COMMERCIAL OR INDUSTRIAL USE ADJOINING AN "R" DISTRICT

TABLE 2
AIRPORT/LAND-USE SAFETY COMPATIBILITY CRITERIA

Land Use Characteristic	Safety Zones				
	Clear Zone	Clustered Low Intensity Industrial Including Inner Approach Zone	Moderate Intensity Industrial Including Outer Approach Zone	Traffic Pattern Zone	Horizontal and Conical Zone
Residential Uses	-	-	(A,F)	(B,F)	+
Other Uses in Structures	-	(C,E,F)	(D,E,F)	(E,F)	+
Other Uses Not in Structures	(C,G)	D	+	+	+
Special Characteristics:					
Distracting Lights or Glare	-	-	-	(G)	(G)
Sources of Smoke or	-	-	-	(G)	(G)
Electronic Interference	-	-	-	+	+

INTERPRETATION

+ Acceptable - Use is acceptable with little or no risks.

() Conditionally Acceptable - Risks exist, but use is acceptable under conditions cited below:

- A Density no greater than 1 dwelling unit per 5 acres.
- B Density no greater than a maximum of 3 dwelling units per acre.
- C No uses attracting more than 10 persons per acre.
- D No uses attracting more than 25 persons per acre.
- E No schools, hospitals, nursing homes, or similar uses.
- F Each parcel created within a safety zone shall retain at least 20 percent of the area in an open condition (having a size and shape such that a small aircraft could conceivably make an emergency landing without damage to buildings or serious injury to aircraft occupants).
- G Characteristic cannot reasonably be avoided or located outside the indicated safety zone.

- Unacceptable - Use is unacceptable due to associated high risks.

Source: Hodges and Shutt, Aviation Planning Services. Revised by C.O.R. 1989.

option is not exercised, the development permit may be processed in accordance with remaining Plan policies and applicable standards.

- 3d. Amend the Redding Municipal Airport Hazard Zoning Ordinance to define and map Inner Approach Zones, Outer Approach Zones, and the Traffic Pattern Zone as shown on Figure 5.

- 3e. Specify the following limitations within the Traffic Pattern Zone:

Schools, hospitals, nursing homes, and similar uses housing persons with low effective mobility should not be permitted.

Subdivision, land division, and design review should ensure that open areas remain, where feasible, having a size and shape such that a small aircraft could conceivably make an emergency landing without damage to buildings or serious injury to aircraft occupants. Conditions imposed may affect the shape of parcels, the location and alignment of streets, and the placement of buildings, but should be consistent with the bulk, coverage, and site area standards established by the zoning regulations.

Within the Inner Approach Zone and the area identified as "Clustered Low Intensity Industrial," uses in structures shall not attract more than 10 persons per acre and uses not in structures (open uses) shall not attract more than 25 persons per acre.

Within the area identified as "Moderate Intensity Industrial," uses in structures shall not attract more than 25 persons per acre.

- 3f. Amend the Redding City Code to include a population density overlay district for approach-zone areas which generally provide that uses in structures should not attract more than 10 persons per acre and that uses not in structures (open uses) should not attract more than 25 persons per acre.

- 3g. Minimum parcel sizes of five acres should be retained in the southeast approach zone of Runway 12-30 for safety reasons.

Generally, in reviewing what to allow within noise and safety zones, guidance should be obtained from the following:

1. State noise policies.
2. Suits against other airports.
3. The value of the public investment.
4. Whether or not a determination can be made that there is a demonstrated community need for noncompatible uses in the noise and safety areas that cannot be met elsewhere in the metropolitan area.
5. Objectives of the Area Plan.



Scale 1" = 3200'

Legend

 Clustered
Low Intensity

 Moderate
Intensity

Industrial Occupancy Classifications

D. DESIGN REVIEW, SITE DEVELOPMENT, NONCONFORMING USES AND STRUCTURES

The future quality and profitability of nonresidential development in the plan area will depend heavily on what is built during the next few years because little commercial or industrial development exists, and no standards have been set by example. Most developers may perceive the desirability of high design standards, but if a few do not, investments will be a risk, and the average quality of new development will start on a declining trend. Multiple-family residential development is proposed at highly visible locations within the planning area and has a strong potential for enhancing or degrading overall quality. In locations where the above uses are not subject to use permit control, a design review committee would be utilized to implement the policies of the plan.

Policies

- 4a. Amend county's and cities' zoning ordinances or set use permit conditions to prescribe site-development standards covering the following:

- Building setbacks
- Types of plant materials and irrigation systems
- Fence and wall design
- Number, width, and location of driveways
- Streets, sidewalks, curbs, and gutters
- Fire-hydrant standards
- Underground utilities
- Screening and noise attenuation for mechanical equipment
- Signs

- 4b. Establish a design review committee composed of staff members from each affected planning agency and other members as may be desired by mutual agreement of the participating legislative bodies. The committee shall develop design standards which can be applied to discretionary as well as ministerial permits for all nonresidential development and for residential projects of six or more attached residential units or six or more units per gross acre. The design standards shall, as a minimum, set forth a single set of criteria to implement the district policies and regulations and various land uses set forth by the plan. It is desirable that the subjects listed under Policy 5p be included. The standards should be adopted by resolution by each legislative body for implementation by each agency through the course of normal permit processing activities.

- 4c. Uses which continue to be or which become nonconforming uses upon adoption of the plan shall be subject to the provisions of the Zoning Ordinance regarding nonconforming uses. It is intended that ordinary maintenance and routine repairs can be made to a nonconforming building in accordance with the applicable provisions of the Zoning Ordinance.

All nonconforming commercial and industrial uses should be reviewed by the City or County prior to issuance of a permit for expansion or conversion to a different use, but no later than five years following adoption of the regulations implementing the specific plan. A nonconforming structure "as distinct from nonconforming use" need not be reviewed unless application is made for a permit to expand the structure or change its use.

The purpose of the review should be to establish a schedule of improvements intended progressively to plan the site development standards toward conformity with these regulations. A development agreement should be executed that specifies a schedule of improvements, the extent of permissible expansion, and the uses to which the property may be converted. The schedule for progress toward compliance with design standards should call for all required improvements to be completed within eight years. Failure to execute a development agreement should require denial of a permit to expand or convert a nonconforming use, and should require that the nonconforming use be eliminated within 20 years from the date of review.

E. LAND USE

The Area Plan designates a parcel-specific land-use pattern for portions of the planning area. Each use designation is intended to be translated to existing or new zoning district regulations to be adopted by each affected jurisdiction.

Table 3 summarizes the land use allocations of the Area Plan, and the following sections list policies relevant to each land-use category.

1. Residential

The highest densities permitted in most of the study area by the Redding draft General Plan and County zoning are 2 units per gross acre, exemplified by the 20,000-square-foot lots typical of the Wooded Acres subdivision. The current county General Plan allows densities up to four dwelling units per acre. The only areas of significantly higher density are in Anderson and in Fairway Oaks Mobile Home Park, with 197 units at 8.2 units per acre. No sewers exist outside Anderson, so the effective minimum lot size has been determined by septic system needs--typically 20,000 square feet. Recently, however, the Regional Water Quality Control Board has required sewers for development at this density north of Rancho Road. The Plan assumes that most new residential development west of Stillwater Creek will have sewers.

The Area Plan provides 10 residential density classifications, ranging from 1 unit per 10 acres to 12 units per acre. At full development, 58 percent of the homes will be at a density of 2 units per acre and 20 percent will be at 3 units per acre; the average urban residential density (1 unit per acre or greater) will be 2.2 units per acre. The total of 5,912 units will accommodate 17,736 persons at an average of 3 persons per unit. There were about 1,445 units in the planning area in June 1981.

TABLE 3
LAND USE SUMMARY, REDDING MUNICIPAL AIRPORT AREA PLAN

<u>Land Use Designation</u>	<u>Number of Acres</u>	<u>Potential Housing Units</u>
<u>Airport Service</u>	1,204 ^a	
<u>Residential</u>		
1 unit/10 acres	317	31
1 unit/5 acres	554	111
1 unit/3 acres	0	0
1 unit/acre	374	374
2 units/acre	1,873	3,747
3 units/acre	236	708
6 units/acre	42	250
9 units/acre	57	513
12 units/acre	8	96
<u>Commercial</u>		
Office	150	
Retail	47	
Highway	15	
Service Commercial	103	
<u>Planned Industrial</u>	1,105	
<u>Schools</u>	5	
<u>Public or Institutional</u>	22	
<u>Park</u>	287	
<u>Greenway and Roads^c</u>	1,772	
<u>Totals</u>	8,250 ^b	5,858
<u>Population</u> (@ 3 persons/household)		17,574

^aFigure includes Airport acquisition area

^bTotal acreage here is less than the total acreage in the planning area because land uses have not been designated west of Churn Creek.

^cFigure is residual after measurement of other uses.

Source: Blayney-Dyett

The residential land-use classifications are described as follows:

- a. 1 Unit Per 10 Acres; 1 Unit Per 5 Acres; 1 Unit Per 3 Acres. These single-family densities are used where neither public sewer nor water are available and on certain hillside areas. Other than in hillside areas, the use of these categories should be limited in order to prevent premature land fragmentation in advance of urban services or reduction of agriculture lands.
- b. 1.0 Dwelling Unit Per Gross Acre. This is essentially a large single-family-lot urban density where public sewer is not available and where soil conditions are such as to allow the use of septic tanks on one-acre parcels. This designation is suitable for hillside areas and in areas where the City does not plan to extend sewer service due to topographic reasons. It is essentially an urban fringe classification for use in areas exclusive of greenway and agriculture, in which the one-acre-parcel pattern is substantial.
- c. 2.0 Dwelling Units Per Gross Acre. This is a single-family category with full urban services available. Typical lots range from 15,000 to 22,000 square feet in area. Planned-unit developments may be constructed in this classification as discussed later in this section. This density is suitable for areas of flat to moderate slopes and in areas where this lot-size pattern is predominantly suitable for conventional single-family subdivisions, cluster subdivisions or planned developments.
- d. 3.0 Dwelling Units Per Acre. This is a single-family residential density with lots ranging from 9,000 to 12,000 square feet in area. This classification is suitable for conventional single-family subdivisions, cluster subdivisions or planned developments.
- e. 4.0 Dwelling Units Per Acre. This is a single-family residential density with lots varying in area from 6,000 to 10,000 square feet. This is suitable for areas of flat to nearly level slopes. Good access is important to those areas so as not to overburden nearby residential streets suitable for conventional single-family subdivisions, cluster subdivisions or planned developments.
- f. 6.0 Dwelling Units Per Gross Acre. This is a transition classification that can be developed as small-lot, single-family residential; duplexes; planned-unit development; low-density multiple-family apartments; and mobilehome parks in appropriate areas. Full urban services would be available and there would be adequate street access and utility capacities. This classification is suitable for areas of flat to low slopes depending upon the form of development. The minimum lot size for single-family homes would be 6,000 square feet and for duplexes or multiple-family developments, 11,000 square feet.
- g. 9.0 Dwelling Units Per Gross Acre. This is a low-density multiple-family classification suitable for duplexes, apartments, dwelling groups, planned developments, condominiums or mobilehome parks.

Minimum lot sizes for duplexes and apartments should not be less than 11,000 square feet. Full urban services would be available, and there would be reasonable proximity to a major arterial.

- h. 12 Dwelling Units Per Acre. This is a multiple-family density for apartments, dwelling groups, planned developments and condominiums. The minimum lot size should not be less than 12,000 square feet. Full urban services would be available, and there would be reasonable proximity to a major arterial. Two story construction would be typical.

Policies

In addition to the basic density designations, the following residential policies apply within the plan area.

- 5a. Limit density of new residential development within the Traffic Pattern Zone to a maximum of three units per acre in accordance with Table 2.
- 5b. Provide housing opportunities for a variety of dwelling types and densities. Within the Traffic Pattern Zone, encourage but do not require clustered housing including attached units.
- 5c. Apply existing City and County zoning regulations appropriate to designated Area Plan density. Amend Shasta County zoning regulations to include districts permitting 6, 9, and 12 residential units per gross acre. Amend County and City of Redding regulations to require design review for projects including six or more attached units or six or more units per gross acre.
- 5d. Greenway areas consisting of slopes in excess of 20 percent or 100-year flood plains should be deducted when computing allowable densities.
- 5e. Planned developments may be granted density bonuses pursuant to the following schedule and if the findings listed in Section 18.36.050 of the City Code are in evidence:

<u>Specific Plan Density (Units/Acre)</u>	<u>Maximum Planned Development Density (Units/Acre)</u>
2.0	2.5
6.0	7.5
9.0	12.0
12.0	14.5

2. Offices

Airport Road offers a potentially attractive environment for regional-serving offices, assuming high design standards are maintained. The first two or three projects will set the standard for the planning

period. The Airport will provide identity; access to air transportation will be a secondary attribute. Once Airport Road becomes established as an office address, related retail and service enterprises, supported in part by Airport activity and in part by office patronage, can survive.

Policies

- 5f. Amend County and Redding zoning ordinances, or set permit conditions to create an office district including the following regulations:

Purpose: Provide a high quality environment for region-serving offices in an office-park setting.

Permitted Uses:

Professional and administrative offices
Business support services

Conditional Uses:

Public utility and public service structures
Retail sales of food to be consumed primarily by persons working on the site or in the immediate area.

Maximum Height: 40 feet; not to exceed 15 feet within 80 feet of an "R" District.

Minimum Site Area and Width: 1 acre, 150 feet.

Maximum Building Coverage and Floor Area Ratio: 30 percent of site area.

Minimum Yards: Front yard 30 feet; street side yard 15 feet; interior rear and side yards 10 percent of parcel depth or width, provided that the minimum 10 feet rear- or side-yard setback shall be not less than 10 feet.

Landscaping and Screening: Required yards adjoining streets and required yards adjoining "R" Districts should be landscaped with plant materials; total minimum planted area 20 percent of site area; 6-foot solid masonry wall or wall of block-posts with solid-wood inserts on property line adjoining an "R" District; minimum 1 shade tree per 8 parking spaces plus row of trees in yards adjoining "R" Districts.

Parking: To be provided in accordance with Table 4 or the Redding City Code, whichever is more restrictive.

Signs: 90 square feet per sign face; maximum two sign faces per site. Signs not to exceed 12 feet in height or to be closer than 12 feet to a property line. Illumination to be indirect. A free-standing sign should be located in a landscaped area.

TABLE 4
PARKING

<u>Use</u>	<u>Minimum Off-Street Parking Requirement</u>
Accessory employee housing or guest cottage	1 space per unit
Administrative office services	1 space per 250 sq. ft. of gross floor area
Animal care facilities	1 space per 350 sq. ft. of gross floor area
Automobile service station	5 spaces, plus queue capacity equivalent to the 1.5 times the service capacity of gasoline pumps
Automotive services:	
a) Enclosed	1 space per 350 sq. ft. of gross floor area
b) Open lot	1 space per 500 sq. ft. of exterior sales, display, or storage site area
Business and trade schools	1 space per 4 persons capacity, or 1 space for each 250 sq. ft. of gross floor area, whichever is greater
Churches and religious institutions	1 space per 4 seats or 4 persons capacity, based on maximum use of all facilities at the same time
Commercial recreation	1 space per 4 seats or 4 persons capacity, based on maximum use of all facilities at the same time
Public and community facilities, including swim club, tennis club, golf course, community centers, neighborhoods centers, and similar activities	1 space per 4 persons capacity, based on maximum use of all facilities
Convalescent facilities	1 space per 2.5 patient beds
Day care facility	To be established by use permit conditions
Drive-up windows providing services	Queue line for 5 cars, not blocking any parking spaces, in addition to other applicable requirements
Eating and drinking services:	
a) With drive-in or take-out	3 spaces per 100 sq. ft. of gross floor area
b) All others	1 space per 250 sq. ft. of gross floor area

<u>Use</u>	<u>Minimum Off-Street Parking Requirement</u>
Financial services:	
a) Bank, savings & loan office	1 space per 150 sq. ft. of gross floor area
b) Others	1 space per 250 sq. ft. of gross floor area
General business services:	
a) Enclosed	1 space per 350 sq. ft. of gross floor area
b) Open lot	1 space per 500 sq. ft. of sales, display, or storage site area
Lodging	1 space per lodging unit, in addition to other residential use requirements
Industry	1 space per 1,000 sq. ft. of manufacturing or warehousing area, or per employee, whichever is greater, plus 1 space per 250 sq. ft. of office area plus 1 space per 250 sq. ft. of retail floor area
Medical, professional, and general	1 space per 250 sq. ft. of gross floor area
Motel	1 space per guest room, plus the applicable requirements for eating and drinking, banquet, assembly, commercial, or other as required for such use, less 75 percent of the spaces required for guest rooms
Multiple-family residential use	1.5 spaces per studio or 1-bedroom unit, and 2 spaces per 2-bedroom or larger unit, of which at least 1 space per unit must be covered
Personal services	1 space per 150 sq. ft. of gross floor area
Private clubs, lodges, and fraternal organizations	1 space per 4 seats or 4 persons capacity, based on maximum use of all space at one time
Research and development	1 space per 250 sq. ft. of gross floor area
Retail:	
a) Enclosed	1 space per 200 sq. ft. of gross floor area
b) Open lot	1 space per 500 sq. ft. of sales or display area
Schools and educational facilities:	
a) Grades K-8	2 spaces per teaching station
b) Grades 9-12	4 spaces per teaching station
Shopping center	1 space per 275 sq. ft. of gross floor area

Use

Single-family residential uses

Warehousing and distribution

Minimum Off-Street Parking Requirement

2 spaces per unit, both of which must be covered

1 space per 1,000 sq. ft. of gross floor area

3. Retail Commercial

Convenience shopping and the Airport have little functional relationship, but Airport Road will be the access route serving a tributary population of about 20,000 persons at full development--enough to support two neighborhood shopping centers. Currently, there are no supermarkets in the study area. The nearest ones are on Hartnell Avenue or in Anderson.

The proposed Plan designates three locations for retail shopping:

Hartnell Avenue west of Airport Road (existing zoning)
Rancho Road and Airport Road, northwest quadrant (existing zoning)
Meadow View Drive at Airport Road

Policies

- 5g. On sites designated for retail development by the Plan that are not currently zoned for that use, withhold zoning designation until assurance is provided that a supermarket of 12,000 square feet or more will be an anchor tenant.
- 5h. Amend County and Redding zoning ordinances or set permit conditions to create a retail commercial district including the following regulations:

Purpose: To provide shopping centers or stores within a building grouped within walking distance of each other to meet the daily shopping needs of persons residing and working in the vicinity of the Airport.

Permitted Uses:

Banks
Bars
Professional and administrative offices
Personal services
Restaurants
Retail stores, provided that no store other than a food store should have more than 12,000 square feet of floor area.
Service stations

Conditional Uses:

Public utility and public service structures
Nurseries

Maximum Height: 40 feet; not to exceed 15 feet within 80 feet of an "R" District.

Minimum Site Area and Width: 1 acre, 150 feet.

Maximum Building Coverage and Floor Area Ratio: 30 percent of site area.

Minimum Yards: Front yard 30 feet; street side yard 15 feet; rear and interior side yards 10 feet.

Landscaping and Screening: Required yards adjoining streets should have a 15-foot strip landscaped with plant materials adjoining the property line; total minimum planted area 20 percent of site area; 8-foot solid masonry wall or planted berm adjoining an "R" District; minimum 1 shade tree per 8 parking spaces plus row of trees adjoining "R" Districts (see Figure 6).

Parking: To be provided in accordance with Table 4 or the Redding City Code, whichever is more restrictive.

Signs: Signs visible from a public street not to exceed a total for all faces of one square foot per lineal foot of building adjoining the street. No sign face should exceed 90 square feet. Maximum one free-standing sign, not exceeding 25 feet in height or closer than 12 feet to a property line. No sign or lighting should move. Internally lighted signs should be shielded from "R" Districts within 200 feet. Free-standing signs should be located in landscaped islands.

4. Highway Commercial

Unlike some large metropolitan airports, the Municipal Airport area is not likely to become a major destination point for air travelers. Still, the combination of nearby offices, industries, and air travelers, coupled with the location identity furnished by the Airport, will make it a logical location for restaurants and possibly for one or more motels.

Policies

- 5i. Designate Airport property on the west side of Airport Road at Knighton Road (where fee ownership or ground lease is available) for highway commercial uses.
- 5j. Amend County and Redding zoning ordinances, or set permit conditions to create a highway commercial district including the following regulations:

Purpose: To provide for the needs of the traveling public and to provide sites for automobile-oriented businesses other than retail stores that need high visibility and highly accessible locations and can maintain design standards that will create a positive image of the community and a good first impression.

Permitted Uses:

Automotive services, including automotive washing, service stations, and automotive rentals, but excluding sales and repairs except as accessory uses.
Nurseries
Professional and administrative offices
Restaurants and bars

Conditional Uses:

Commercial recreation, including theaters, bowling alleys, electronic games.
Hotels, motels, and campgrounds
Public utility and public service structures
Drive-ins

Maximum Height: 40 feet; not to exceed 15 feet within 80 feet of an "R" District.

Minimum Site Area and Width: 1 acre, 150 feet.

Maximum Building Coverage and Floor Area Ratio: 30 percent of site area.

Minimum Yards: Front yard 30 feet; street side yard 15 feet; rear and side yards 10 feet, provided that a rear yard adjoining an "R" District should be not less than 10 percent of the parcel depth and a side yard adjoining an "R" District should be not less than 10 percent of the parcel width.

Landscaping and Screening: Required yard adjoining streets should have a 15-foot strip landscaped with plant materials adjoining the property line; 8-foot solid masonry wall or planted berm adjoining an "R" District; minimum 1 shade tree per 8 parking spaces plus row of trees in yards adjoining "R" Districts (see Figure 6).

Parking: To be provided in accordance with Table 4 or the Redding City Code, whichever is more restrictive.

Signs: 90 square feet per sign face; maximum 2 sign faces per site; maximum 1 free-standing sign. Signs not to exceed 25 feet in height or be closer than 12 feet to a property line. No sign or lighting should move. Internally lighted signs should be shielded from "R" Districts within 200 feet. Free-standing signs should be located in landscaped islands.

5. Service Commercial

Auto repair, storage yards, indoor storage, and retail businesses not normally found in shopping centers are representative service commercial uses. A small grouping of such uses exists on the west side of Airport Road south of the Brentwood Subdivision, and additional zoning for commercial services adjoins the north side of Highway 44 at the Airport Road interchange.

Policies

- 5k. Recognize existing commercial service development and designate additional space north and south of Highway 44 at the Airport Road interchange.

51. Amend County and Redding zoning ordinances, or set permit conditions to create a service commercial district including the following regulations:

Purpose: To provide suitable locations for service establishments and commercial uses that usually cannot meet the design standards prescribed for other commercial uses in the Airport Specific Plan area, that usually need screening from adjoining thoroughfares and adjoining properties, or are characterized by outside sales or storage, and which do not lend themselves to park or mall development concepts.

Permitted Uses:

- Agricultural sales and services
- Automotive sales and services
- Building maintenance services
- Building materials sales
- Business support services
- Communications services
- Consumer repair services
- Construction equipment sales and services
- Storage within a building
- Laundry services
- Nurseries
- Personal improvement services; business and trade schools
- Pet services
- Professional and administrative offices
- Research services
- Veterinary services
- Warehousing and distribution
- Outdoor sales establishments

Conditional Uses:

- Kennels
- Public utility and public service structures
- Recycling centers entirely within a structure
- Outdoor storage

Maximum Height: 40 feet; not to exceed 15 feet within 80 feet of an "R" District.

Minimum Site Area and Width: 12,000 square feet, 150 feet on expressways, arterials and collectors, 80 feet on other streets.

Minimum Yards: Front 30 feet adjoining an expressway or major thoroughfare, 20 feet elsewhere; rear and side 5 feet, provided that a rear yard adjoining an "R" District should be not less than 10 percent of the parcel depth and a side yard adjoining an "R" District should be not less than 10 percent of the parcel width.

Screening, Buffer: Exterior storage other than parking should be screened by an opaque wall or dense planting; 8-foot solid masonry wall or planted berm adjoining an "R" District (see Figure 6).

Parking: To be provided in accordance with Table 4 or the city Code, whichever is more restrictive.

Signs: 90 square feet per sign face; maximum 180 square feet per site; maximum 1 free-standing sign. Signs not to exceed 25 feet in height or be closer than 12 feet to a property line. No sign or lighting should move. Internally lighted signs should be shielded from "R" Districts within 200 feet. Free-standing signs should be located in landscaped islands.

6. Planned Industrial

Industry is the only urban use that is compatible with noise and safety standards applying to land within the Airport approach zones extending about one and one-half miles from the ends of the main runways. Industry can accept the 65-70 CNEL noise levels, and within the Inner Approach Zone (one-half to one mile from the end of the runway), it can maintain densities below 10 persons per acre in structures in accord with the safety standards.

The rate of industrial land absorption is difficult to project. Mountain Lakes Industrial Park is the best model available in the South Central Urban Region of Shasta County. With the important benefits of unified ownership and marketing, rail access, and Federal EDA grants to help finance streets and utilities, Mountain Lakes has marketed an average of about 20 acres per year since its inception in 1970. Industry at the Airport will have the advantages of a location central to its labor supply and distribution area and airport identity. The proportion of aviation-related industry will be small, based on experience at similar airports.

In keeping with the objective of enhancing the appearance of the Airport area as a major entry point to the region, the standards for industrial development should be high. This policy will enhance industrial property values in the planning area over the long term.

Reasons for the amount of industrial land shown on the area plan are summarized as follows:

- a. Residential uses within a 60 CNEL contour should be discouraged.
- b. Airport-safety considerations should preclude intensive human-occupancy uses within approach zones.
- c. Alternative more intensive uses will generate additional vehicle traffic.
- d. The area is ideally situated between existing residential areas to the northwest and south to reduce job commutes.
- e. Under present land-use practices, the industrial category is the only valid land-use classification compatible with a jet airport, which gives private ownership a reasonable use of the land.

- f. A concentrated effort is now beginning in the County to attract industrial development to the County.
- g. The area has good potential truck access.
- h. The communities need to reserve and protect areas for industrial development for the long-term benefit of the County.
- i. The other options to "Industrial," which meet State criteria and the objectives of the Plan, are "Open Space," "Agricultural," and "Residential," one unit per five or ten acres. These are not considered viable due to past subdivision activity both north and south of the Airport.
- j. Using commercial classifications for areas classified as "Industrial" will expose more people to safety considerations and will detract from existing undeveloped commercial areas in the County and its Cities.

The locations of areas shown as "Industrial" are appropriate for the following reasons:

- a. Industrial uses are compatible with an Airport.
- b. Industrial uses meet State and Plan safety and noise considerations.
- c. Industrial uses provide a more reasonable use of the land as compared to "Open Space," "Agriculture," or very large-lot "Residential."
- d. Industrial uses reflect the size of existing parcels in much of the area that could not be used for large-lot "Residential" due to past subdivision activity.
- e. Traffic along Airport Road will encourage conversion to more intensive uses.

Policies

- 5m. Designate for industrial use off-airport land within the projected 60 CNEL that is suitable for industrial development. Designate for industrial use land within the projected 60 CNEL that is suitable for industrial development, giving consideration to its relationship to industrial land within the 60 CNEL contour and to the intent to minimize residential development within the 60 CNEL contour.
- 5n. Establish industrial development standards that will make the area attractive to office and industrial park-type uses and compatible with nearby residential development. Vary site-development standards to require higher standards on larger parcels at high visibility locations adjoining thoroughfares and less demanding standards on smaller parcels.

- 5o. Assist property owners in marketing their land by helping provide preliminary engineering services or master utility plans leading to formation of assessment districts for wastewater collection and disposal and for other improvements.
- 5p. Amend County and Redding zoning ordinances, or set conditions to create a special planned industrial district including the following regulations:

Purpose: To provide space for a wide variety of manufacturing, distribution, processing, and office enterprises that do not have nuisance features and that can maintain high design standards. Retail sales incidental to a nonretail use are to be conditional uses. Uses fronting on or having access from a major or secondary thoroughfare or a frontage road should meet higher design standards and should be on larger sites than other development in order to ensure the high quality appearance of the thoroughfares and to minimize the points of traffic conflict.

Permitted Uses:

Distribution

Professional and administrative offices

Warehousing

Wholesale sales, conducted within an enclosed structure or completely screened from view from adjoining sites and/or public streets.

Crop and tree farming

Nursery

Light manufacturing, assembly, or fabrication where characterized by indoor locations and no objectionable characteristics relating to sound, odor, vibration, airport safety, and dust.

Conditional Uses:

Manufacturing

Processing

Retail sales, provided that not less than 3/4 of the merchandise measured by wholesale value has been manufactured on the premises, and/or provided that the retail function should be clearly subordinate and incidental to the primary function of the establishment.

Retail sales of food to be consumed primarily by persons working on the site or in the immediate area.

Extractive industry

Public utility and public-service structures

Contractors yards or general outdoor storage activities when associated with a permitted use; truck trailer rentals; local or long distance trucking with or without on-site enclosed storage of transported goods; truck maintenance or repair when conducted as part of permitted hauling or sales activity; provided that in all cases, design review standards, including adequate screening are met and further provided that no such uses shall be established along Airport Road or along the future bypass/connector. Truck, tractor, trailer sales or heavy equipment sales of a wholesale or retail nature, provided that in all cases, design-review standards are met.

Prohibited Uses:

- Auto wrecking yards
- Metal salvage yards
- Storage yards

Maximum Height: 40 feet, not to exceed 15 feet within 80 feet of an "R" District.

Minimum Site Area and Width: 50,000 square feet, 200 feet provided common interest subdivisions may be approved on a parcel of 50,000 square feet or greater. No land division shall create parcels smaller than five acres within the Inner Approach Zone.

Minimum Yards: 30 feet adjoining a major or secondary arterial or frontage road; 20 feet adjoining a minor street. Side and rear yards should be 10 percent of the parcel width or 20 feet, whichever is less; side or rear yards adjoining an "R" District should be 25 percent of the parcel width or depth or 50 feet, whichever is less.

Landscaping and Screening: Landscaping shall be required in yards adjoining any street. Adjacent to a residential area, an eight-foot-high solid-masonry wall or a landscaped berm shall be provided together with a row of trees. Within off-street parking areas, one shade tree per eight parking spaces shall be provided.

Parking: To be provided in accordance with Table 4 or the Redding City Code, whichever is more restrictive.

Signs: Maximum 1 square foot of sign face per lineal foot of street frontage, not to exceed 2 sign faces per site or 200 square feet per sign face. Signs not to exceed 30 feet in height or be closer than 12 feet to a property line. No sign or lighting should move. Internally lighted signs should be shielded from "R" Districts within 200 feet. Free-standing signs should be located in landscaped islands. A portion of the allowable sign area may be allocated to combined off-site signs identifying two or more establishments and located within the Planned Industrial District.

Performance Standards:

Noise: Should not exceed ambient CNEL on adjoining properties within the industrial district by more than three decibels; should not result in any measurable increase in the ambient noise level in residential districts.

Emissions: Compliance with standards established by the Shasta County Air Pollution Control District.

Odors: No annoying odors to be readily detectable beyond the property line.

Vibration: No vibration detectable without instruments at the property line.

Electromagnetic Interference: No use should produce electromagnetic interference with normal radio or television reception in residential districts or with the function of electronic equipment beyond the property line.

Glare: No intense light or glare that creates a nuisance or hazard for aircraft or beyond the property line.

Toxic or Noxious Matter: Compliance with all applicable regulations.

Radiation: Compliance with all applicable regulations.

Heat and Humidity: No nuisance beyond the property line.

Fire and Explosive Hazards: Compliance with all applicable regulations.

Liquid and Solid Wastes: Compliance with all applicable regulations.

7. Airport Service

This classification includes activities more specifically depicted on the Airport Master Plan, which are typically associated with a municipal airport and described as follows:

- a. Those activities involving the sale of aviation services for profit to the general public, including maintenance, storing and servicing of aircraft; sale of aircraft parts and accessories; sale of aircraft fuel, lubricants and propellants; sale of areial survey photography and mapping service; sale of aerial taxi and sight-seeing services; operation of nonscheduled and chartered transportation; etc.
- b. Those activities which involve the maintenance of facilities for the basing and servicing of the aircraft of an individual, private organization, or corporation solely for its own benefit and not for the public.
- c. Those activities which do not require direct airfield access such as transient retail service, and lodging uses such as hotels, motels, restaurants, conference centers, car-rental agencies, lounges, and service stations, provided all applicable safety criteria are met.
- d. Areas set aside or used for the operation of aircraft, including areas to be reserved for protection from encroaching obstructions or facilities such as clear zones, runways and taxiways.

- e. Areas required for airport maintenance or operating services such as fuel storage, air navigational aids and hanger and tie down areas.
- f. Areas encompassing the passenger terminal buildings, automobile parking lots, service and passenger roads, and portions of aprons adjacent to the terminal buildings.

Policy

5q. Develop a zone to implement the Airport-service designation.

8. Open Space, Conservation, and Recreation

a. Parks and Recreation

Airport property adjoining and east of Stillwater Creek has been designated for recreational use by the Redding General Plan since 1970. It occasionally is used for drag races and similar recreational activities that are not acceptable near residential areas and have disturbed residents south of the Airport. Revision of the Recreation Element of the Redding General Plan, now in progress, will determine the appropriate recreational uses for this land.

A small park is also shown adjoining Airport Road at the Sacramento River bluff.

If neighborhood or community parks are to be provided for the 17,000 future residents of the planning area, it will be necessary to require land dedication or collect fees as a condition of subdivision approval. This practice is standard in most California cities, particularly since Proposition 13 removed alternative revenue sources, but is not followed in Shasta County. Maintenance of neighborhood parks is not normally a county service, yet failure to secure sites makes later provision of parks by an annexing city or a recreation district difficult or impossible.

Park land or improved open spaces consist of both private and public open space. These areas are intended to provide urban locations for both active and passive recreation activities. Parks, as described in the Recreation Element, include neighborhood, community and regional parks. School playgrounds, although depicted as institutional uses, are also considered as improved open space. Airport approaches can also be classified as improved open space for low-human density uses. Example of private parks are golf courses, tennis clubs, country clubs, etc.

Policies

5r. Specify the recreational use of Airport property in the revised Recreation Element of the Redding General Plan. Designate for recreational use on County General Plan.

- 5s. Enact a county ordinance requiring land dedication or in-lieu payments to provide neighborhood park sites in accord with standards similar to those applied to subdivisions within the City of Redding as a condition of residential-development approval where future annexation to a city or formation of a district to maintain recreational facilities is deemed likely.

b. Agriculture

Although about one-third of the planning area currently is zoned or used for agriculture, the units, already small, will be surrounded by urban development and rendered less efficient than they are now. Strawberry plant acreage in the study area has declined even where land has not been converted to urban use.

Agricultural land or productive open space consists primarily of existing agricultural. These areas are predominantly Class I and II soils. All of these lands are outside the City limits and none have been designated on the Plan. The minimum parcel size for this category is 30 acres. By permit, a second residence could be placed on the property for a family member or employee of the farming enterprise. Productive open space without residential uses is deemed compatible with airport-approach areas.

Policy

- 5t. Protect but do not require continuation of existing agricultural operations.

c. Greenway

The intent of the Plan is to preserve the natural form of the creeks and the existing riparian vegetation. Drainage plans have not been prepared, but the Ott report contains an analysis of the problems. The Clover Creek channel will need substantial enlargement, while the Stillwater Creek channel and flood plain have adequate capacity. Modifications to the existing 100-year flood plain along Clover Creek will be necessary.

Greenway is natural open space and includes slopes in excess of 20 percent and the 100-year flood plains of the Sacramento River and various creeks and streams. Because of the inherent dangers to life and property, and irrevocable damage to the natural environment, these natural land and water areas should not be urbanized or altered in any significant way so as to prevent severe erosion and defacement or loss of life and property. Each of these areas is identified by best available topographic maps and special flood-plain studies prepared by the U.S. Army Corps of Engineers or other government agencies.

In addition to health and safety concerns, these natural areas serve as places in which natural flora or fauna can be maintained in their natural state. They provide relief from urbanization, reduce siltation from excessive grading, buffer various land-use

activities, and can be part of our urban trial system. Areas in excess of twenty-percent slope do not carry any residential credit unless an entire parcel is so designated, in which case, by use permit, one dwelling unit per 40 acres may be permitted. Areas of endangered plants or wildlife are also areas designated as permanent open space. Land shown as natural open space is predominantly along the Sacramento River, Clover Creek, Stillwater Creek, and the bluffs east of Churn Creek. Airport approach areas may also be classified as natural open space in order to prevent damage to life and property or to reduce the psychological stress of airport noise upon incompatible uses.

Policies

- 5u. Clover Creek improvements should avoid an engineered look and should retain riparian vegetation where feasible. The greenway adjoining Clover Creek should be 200 feet wide, centered on the creek.
- 5v. No structures should be built in the Stillwater Creek 100-year flood plain as shown in the Army Corps of Engineers Study, Loomis Corners, California, dated October, 1977, or within the flood-way area shown on maps entitled Flood Hazard Boundary Maps, U.S. Department of Housing and Urban Development, December, 1977, whichever is more restrictive. The flood-way area shall be designated on the Area Plan as "Greenway," provided that one residential unit may be built above flood level on an existing parcel that has no building site outside the flood plain, subject to a use permit provided both the unit and its inhabitants are protected above the 100-year flood-plain elevation. Riparian vegetation should be retained to the maximum extent feasible.
- 5w. Continue gravel extraction in Stillwater Creek under use permit control.
- 5x. Dedication of open space easements incorporating "Greenways" shown on the Area Plan should be required as a condition of development approval. Recreational uses that do not require structures or removal of riparian vegetation should be permitted.
- 5y. Steep slopes (slopes in excess of 20 percent) located along the drainage corridors shall also be shown as "Greenway."
- 5z. In those areas where future development plans show with certainty that a parcel or a portion of a parcel is not affected by the greenway criteria (slopes, riparian vegetation, flooding) then that parcel or portion of the may be developed in accordance with the adjoining land-use designation.

9. Public and Institutional Uses

This classification consists of public and quasi-public uses other than airports, including but not limited to schools, government offices, government services and facilities, fire stations, hospitals, cemeteries, waste-water-treatment facilities, and domestic water-storage facilities.

These uses, and the manner in which they are introduced into the community, have a considerable influence on the image of the City and of the entire planning area. Further, such uses are often in or near residential area; and care needs to be exercised in the siting of buildings, parking areas, playfields, landscaped areas, and the scale of the facility in regard to the context of the area in which they are located.

Those public and institutional facilities often generate considerable traffic--both vehicular and pedestrian. As such, their siting and methods of providing access and adequate off-street parking need to be given special attention.

The noise-generating functions of some of these uses may require space separation and landscaped buffers between such noise-generating parts and their neighbors, particularly where adjacent property is used for residential or other more restrictive uses.

Schools

Pacheco School and Prairie School in the Pacheco Union Elementary School District are near the boundaries of the planning area. Portions of the planning area include five elementary and two high school districts. Full development will generate enough elementary school students to fill three additional schools. It is probable that no additional sites will be needed in the planning area, but the Area Plan does not foreclose the possibility.

Shasta County has imposed fees on new development in order to finance new sites and facilities for some school districts. Cascade School District has requested that the City of Anderson collect fees from developers.

Policies

5aa. All public and institutional uses should be subject to a plan-review process prior to the issuance of permits to construct such facilities. Such review process should address the concerns stated above to assure that these public and institutional uses are allowed to provide their intended functions and service to the people of the planning area in a context compatible with their surrounding environment.

5bb. Refer development proposals to school districts and amend Area Plan, if necessary, to include one or more school sites to be located in accord with Area Plan policies.

Water

The Area Plan does not include proposals for water supply and distribution.

Policy

5cc. Water systems adequate to handle both domestic and ISO fire flow requirements should be installed.

Wastewater

The Area Plan does not include wastewater collection or treatment proposals. (See Assumptions.)

5dd. Wastewater treatment systems serving development outside a sewer district should be designed to be fully compatible with a future sewer system. As a condition of approval of development using an individual system other than a single-family residence, the applicant should waive the right to protest future formation of an assessment district of collection and treatment of wastewater.

Surface Drainage

See policies 5u and 5v.

Fire Protection

5ee. Designate a fire station site in the vicinity of Rancho and Airport Road or Shasta View Drive and Airport Road.

F. CIRCULATION

Major additions and improvements to the planning area's street system will be needed as the number of vehicle trips increases by eight times or more. Appendix A describes the assumptions used in projecting traffic at full development.

Airport Road, as the planning area's "main street," will carry up to 27,400 vehicles per day north of Meadow View Drive and should have cross streets and left turn points spaced no closer than half-mile intervals where possible. South of Meadow View Drive, average daily traffic demand is projected at 42,000 vehicles, exceeding the potential capacity of improvements that could be constructed without relocating existing buildings. Although most existing buildings fronting on this segment of Airport Road should be relocated as the use changes from "Residential" to "Industrial," right-of-way acquisition should be held to a minimum. By attracting 24,000 vehicles to a parallel Airport Road bypass to the west, only 6 to 18 feet of additional right of way will be needed on each side of Airport Road between Meadow View Drive and the Sacramento River. Most of the bypass right of way north of Dersch Road can be obtained as a condition of subdivision approval, and the location of left turns can be controlled. Even if the bypass were not constructed, new streets would be needed to allow development of the land between existing Airport Road and Wooded Acres

Subdivision. In placing the bypass on the Plan, it was concluded that the bypass will:

1. Reduce truck traffic on North Street in Anderson.
2. Provide another point of access to the I-5 Freeway.
3. Make use of the full freeway interchange at Riverside Avenue, instead of the partial interchange at North Street, which does not serve traffic originating to the south.
4. Eliminate the need to widen Airport Road to six lanes.
5. Reduce disruption of people along Airport Road.

Policies

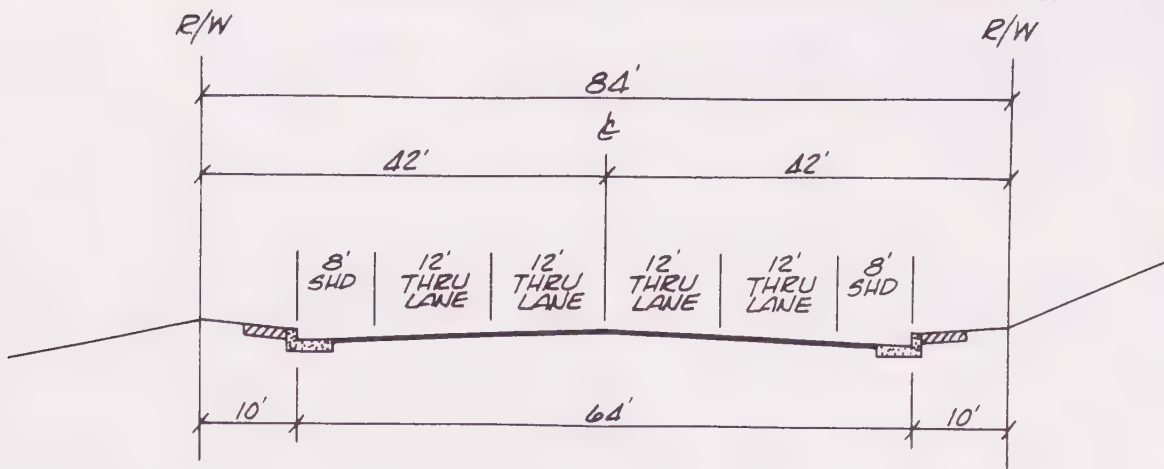
- 6a. As a condition of development approval, require right-of-way dedication and construction of full or partial improvements in accord with the schedule in Table 5 and the cross section standards shown in Figure 7.
- 6b. Design Airport Road north of Meadow View Road and Airport Road bypass with a continuous landscaped median interrupted for left turns at approximately half-mile intervals.
- 6c. Align Knighton Road as shown to provide direct connection between I-5 and Airport Road while minimizing severance at Churn Creek golf Course and adjoining parcels. Knighton Road shall be designated as a limited access facility.
- 6d. Realign Hartnell Avenue and Old Oregon Trail as shown to provide greater separation from Highway 44 off ramps, allowing both the ramps and Hartnell Avenue to be signalized.
- 6e. Provide sidewalks on all through streets and all streets having minimum parcel sizes smaller than one acre and allow sidewalk use by bicycles. The intent is that children and recreational bicyclists use the sidewalks where there will be only light pedestrian use, and experienced bicyclists and commuters use the streets.
- 6f. Limit driveways on major arterial and expressway frontage to 1 per 400 feet or 1 per parcel with less than 400 feet of frontage.
- 6g. Encourage development of frontage roads along Airport Road. Retain Churn Creek Road in front of Pacheco School as a frontage road after Knighton Road is constructed.
- 6h. Review and encourage function of assessment districts, special benefit districts and reimburse agreements to fund major road improvements.

	Existing Right of Way (Feet)	ADT Volume 1981	Specific Plan Designation	Proposed Right of Way (Feet)	Lanes	Service Level C ADT Volume	Projected Volume at Full Development
<u>Airport Road</u>							
Highway 44 to Venus Way	84	5,500	Expressway	84	4 (Med, Pkg)	24,000	21,000
Venus Way to Rancho Road	84	5,500	Expressway	84	4 (Med, Pkg)	24,000	27,400
Rancho Road to Shasta View Dr.	84	4,700	Expressway	84	4 (Med, Pkg)	24,000	18,800
Shasta View Dr. to Knighton Rd.	84	4,500	Expressway	84	4 (Med, Pkg)	24,000	24,900
Knighton Rd. to Meadow View Dr.	84	4,200	Expressway	84	4 (Med, Pkg)	24,000	23,500
Meadow View Dr. to Industrial Rd.(P)	84	4,900	Major Arterial	84	4 (LT, Pkg)	17,000	12,000
Industrial Rd. to Dersch Rd.	60-84	5,400	Major Arterial	84	4 (LT, Pkg)	17,000	12,500
Dersch Rd. to North St. Bridge	60-75	6,800	Major Arterial	84	4 (LT, Pkg)	17,000	18,000
<u>Airport Road Bypass (P)</u>							
Meadow View Dr. to Industrial Rd.(P)	--	--	Expressway	110	4 (Med, Pkg)	24,000	14,000
Industrial Rd.(P) to Churn Creek Rd.(P)	--	--	Expressway	110	4 (Med, Pkg)	24,000	17,000
Churn Creek Rd. to Bridge (P)	--	--	Expressway	120	4 (Med, Pkg)	24,000	24,000
<u>North Street</u>	84	--	Major Arterial	96	4 (LT, Pkg)	17,000	18,000
<u>Hartnell Ralignment (P)</u>	--	--	Major Arterial	96	4 (LT, Pkg)	17,000	8,000
<u>Argyle Road</u>	84	2,000	Collector	84	4 (Pkg)	13,000	8,000
<u>Venus Way (P)</u>	--	--	Local Collector	64	2 (Pkg)	8,000	8,000
<u>Old Oregon Trail</u>	60	--	Collector	84	2 (Pkg)	8,000	--
<u>Rancho Road</u>							
East of Airport Rd.	60	5,500	Collector	84	4 (Pkg)	13,000	--
West of Airport Rd.	60	2,600	Collector	84	4 (Pkg)	13,000	8,000
<u>Shasta View Drive (P)</u>	--	--	Major Arterial	96	4 (LT)	17,000	15,000
<u>Knighton Road (P)</u>	--	--	Expressway	110	4 (LT)	24,000	18,000
<u>Meadow View Drive</u>	60	2,400	Collector	84	2 (Pkg)	8,000	3,000
<u>Industrial Road(P)</u>	--	--	Industrial Road	64	2 (Pdg)	8,000	
<u>Frontage Road(P)</u>							
Rancho Rd. to Meadow View Dr.	--	--	Frontage Road	64	--	--	--
<u>Fig Tree Lane</u>	60	--	Collector	84	4 (Pkg)	13,000	--
<u>Dersch Road</u>	60	2,400	Major Arterial	96	4 (LT, Pkg)	17,000	--
<u>Riverside Avenue</u>	60	--	Arterial	84	4 (LT, Pkg)	13,000	--

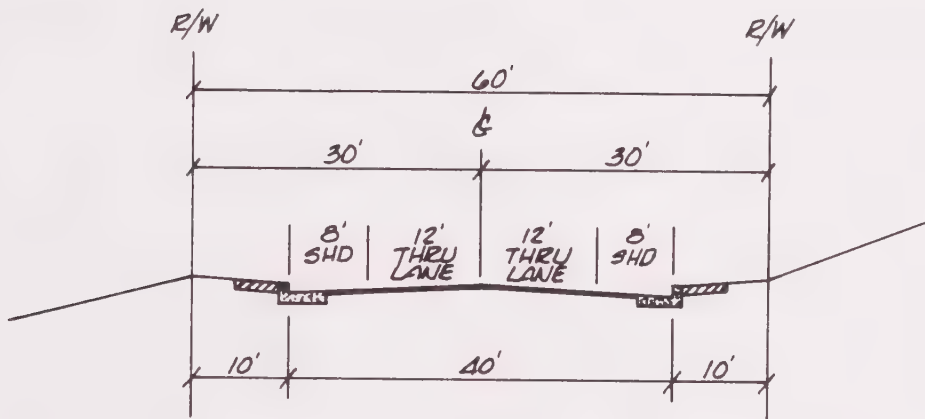
(P) = Proposed Road
Med = Median

Pkg = Parking
LT = Left Turn

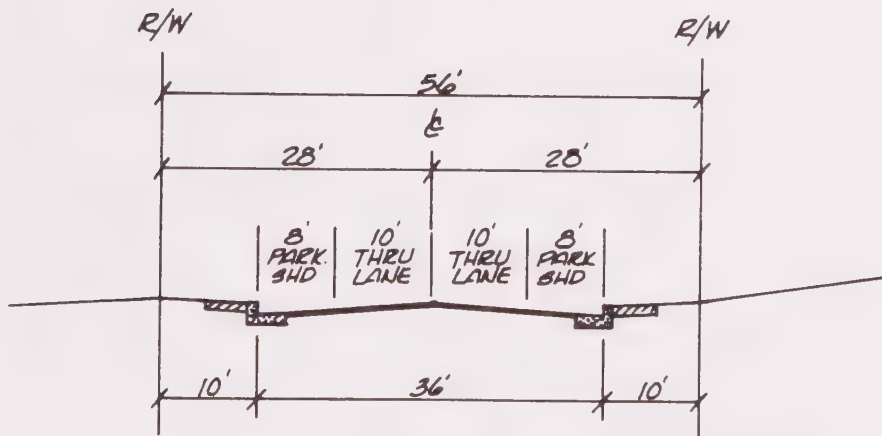
FIGURE 7a. STREET STANDARDS, CROSS-SECTIONS



84' R/W COLLECTOR STREET STANDARD - 4 LANES

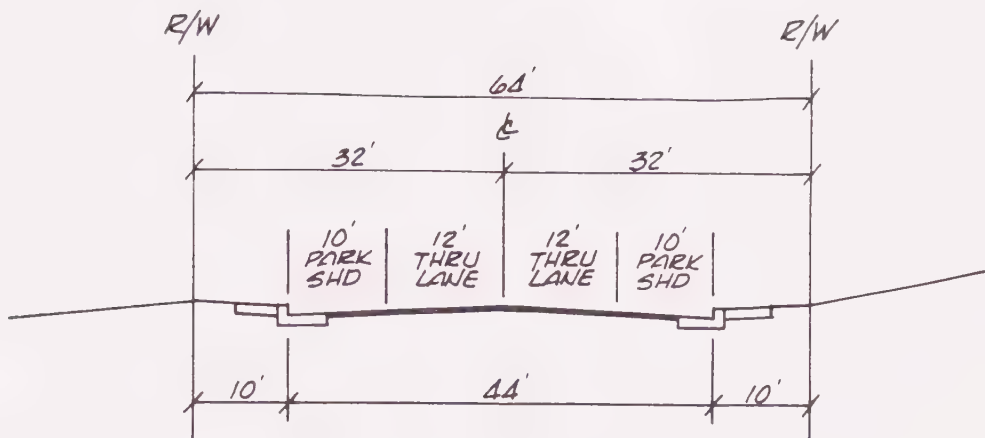


60' R/W LOCAL-COLLECTOR STANDARD - 2 LANES

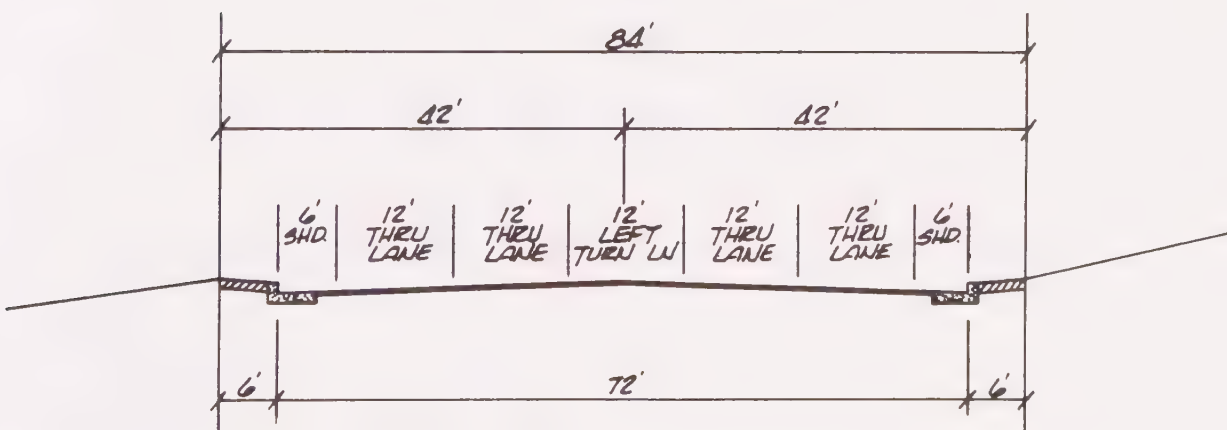
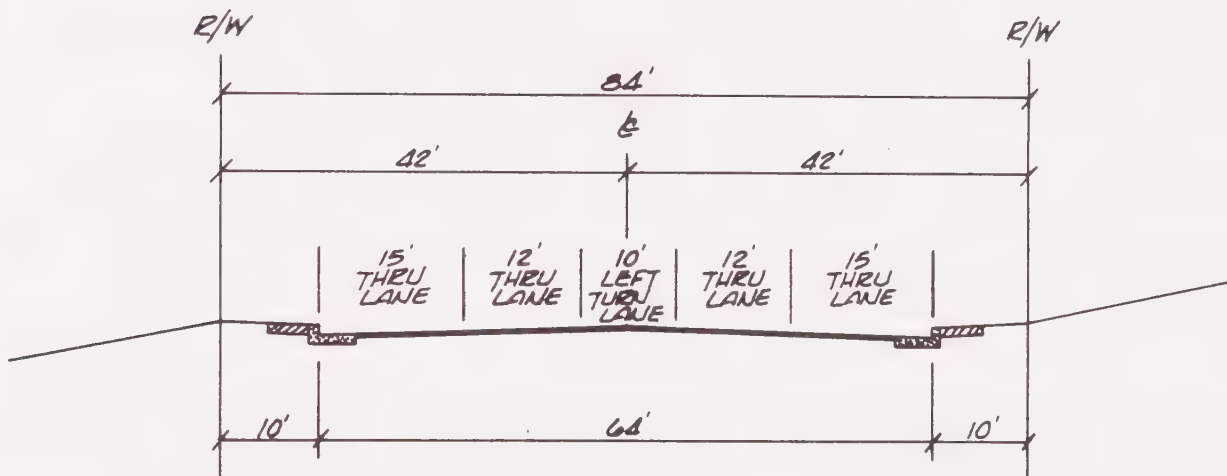


56' R/W LOCAL STREET STANDARD

FIGURE 7b. STREET STANDARDS, CROSS-SECTIONS

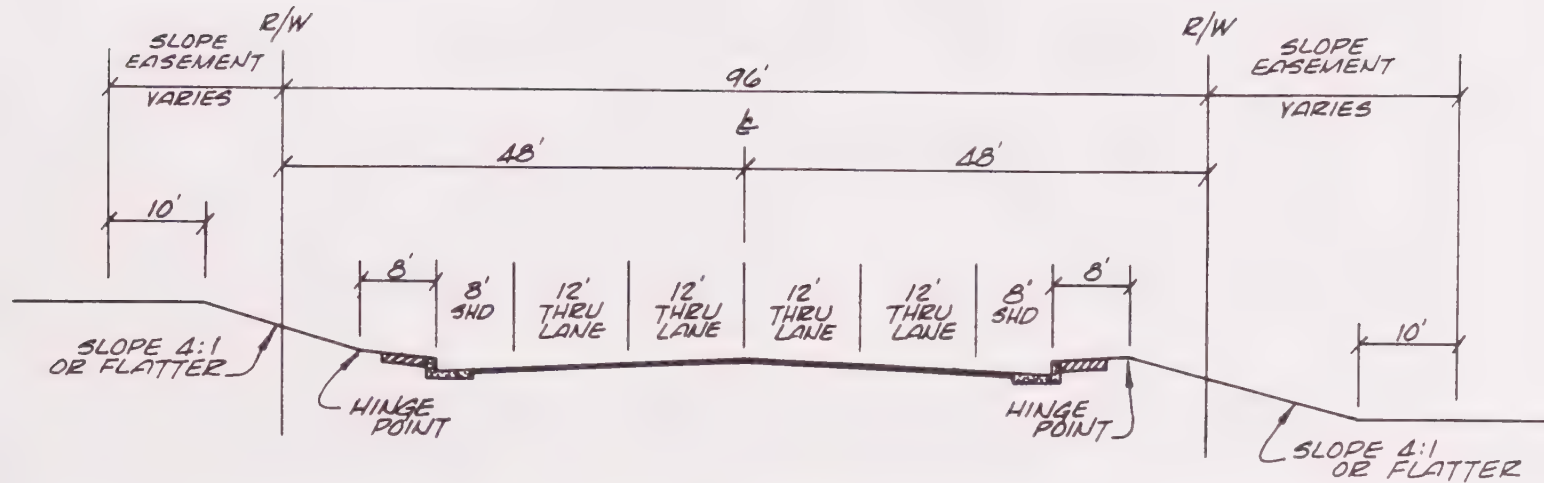


64' R/W INDUSTRIAL STREET STANDARD

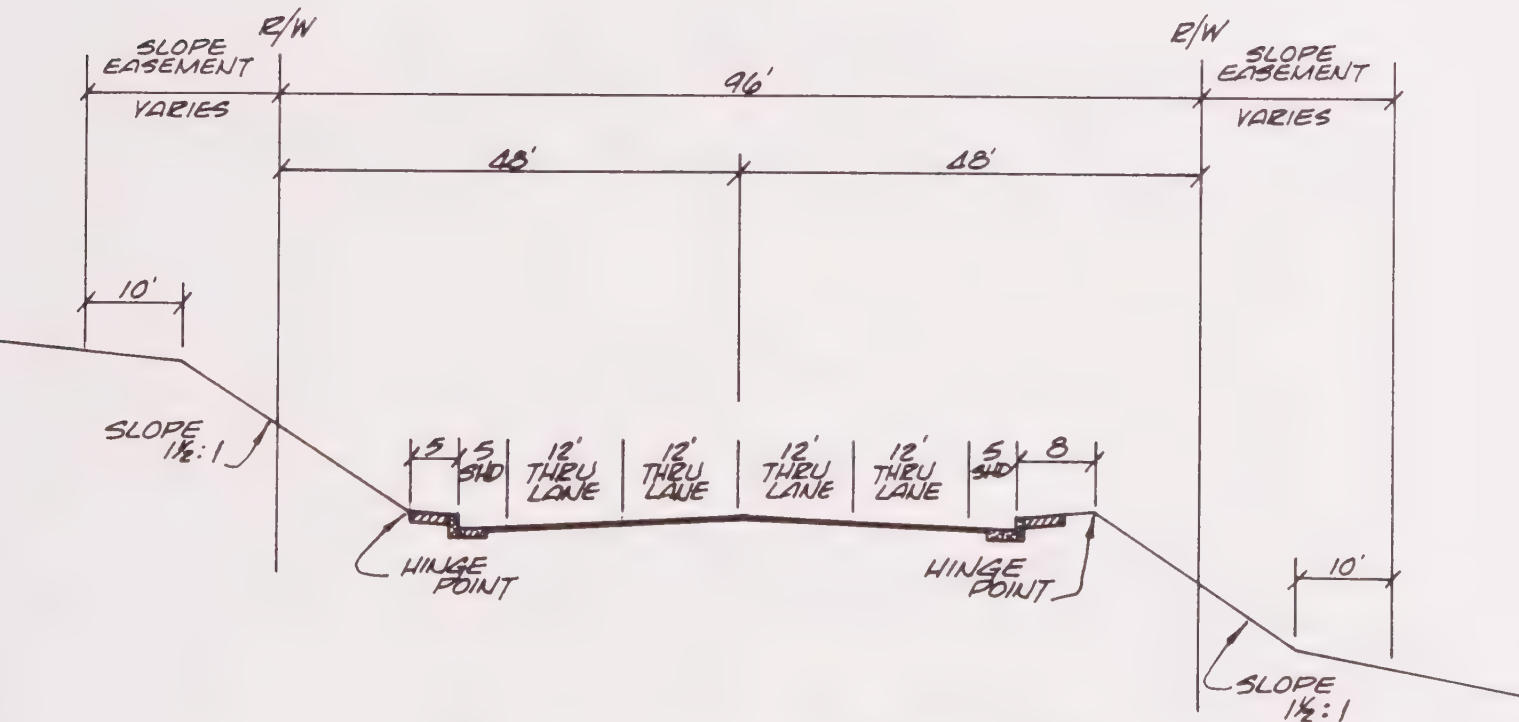


84' R/W MAJOR ARTERIAL STANDARD OPTIONS

FIGURE 7c. STREET STANDARDS, CROSS-SECTIONS

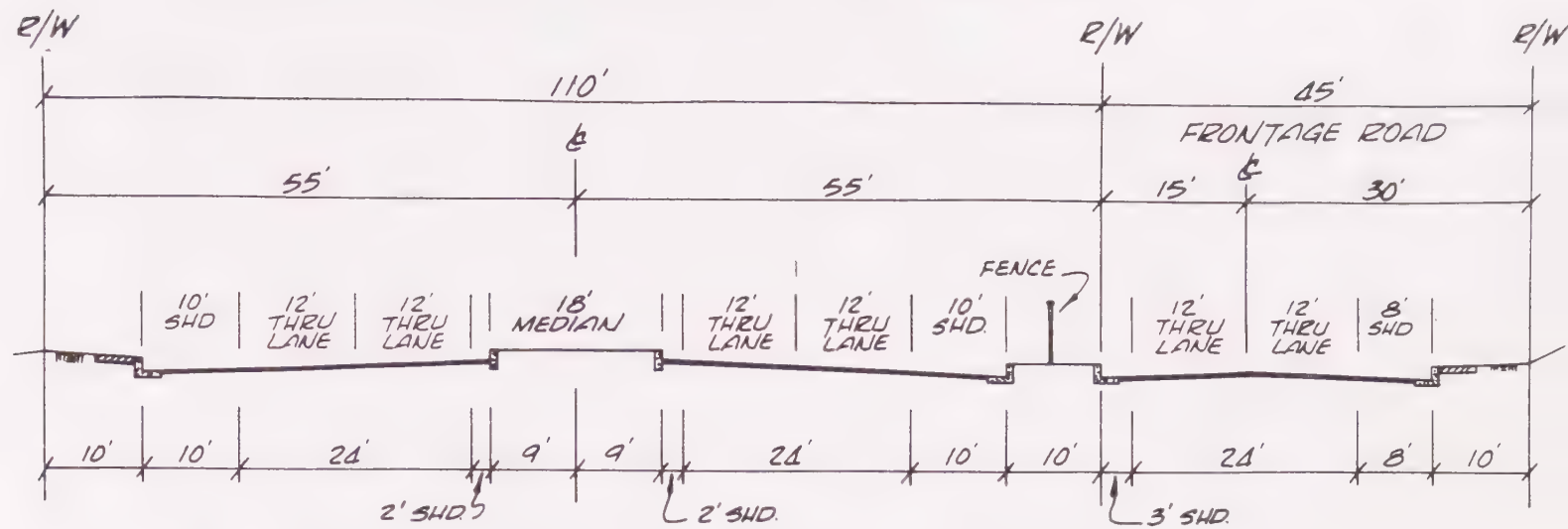


96' R/W MAJOR ARTERIAL THOROUGHFARE STANDARD
IN TERRAIN WITH MODERATE RELIEF.

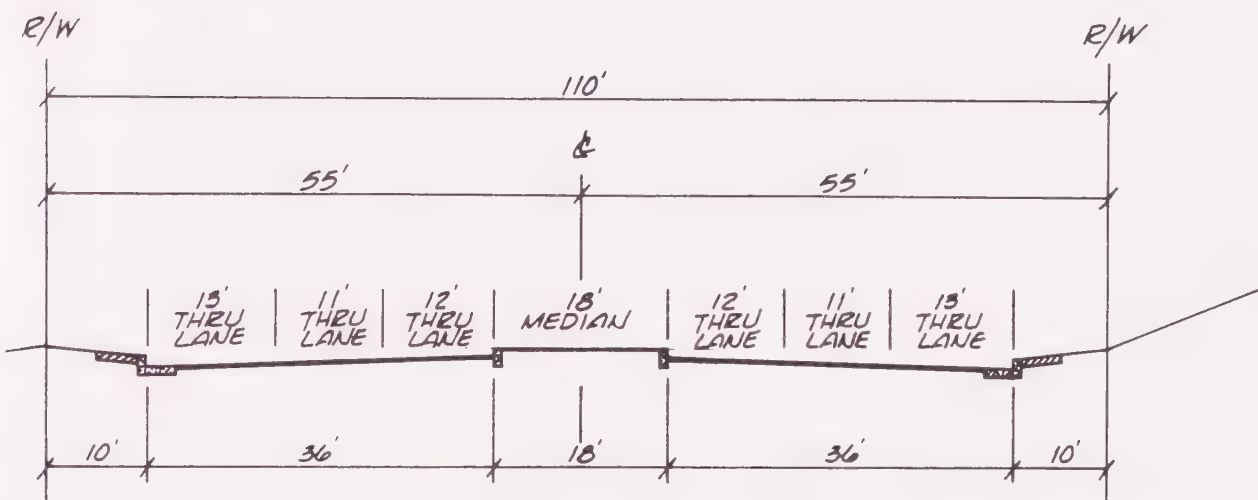


96' R/W MAJOR ARTERIAL THOROUGHFARE STANDARD
IN TERRAIN WITH STEEP RELIEF.

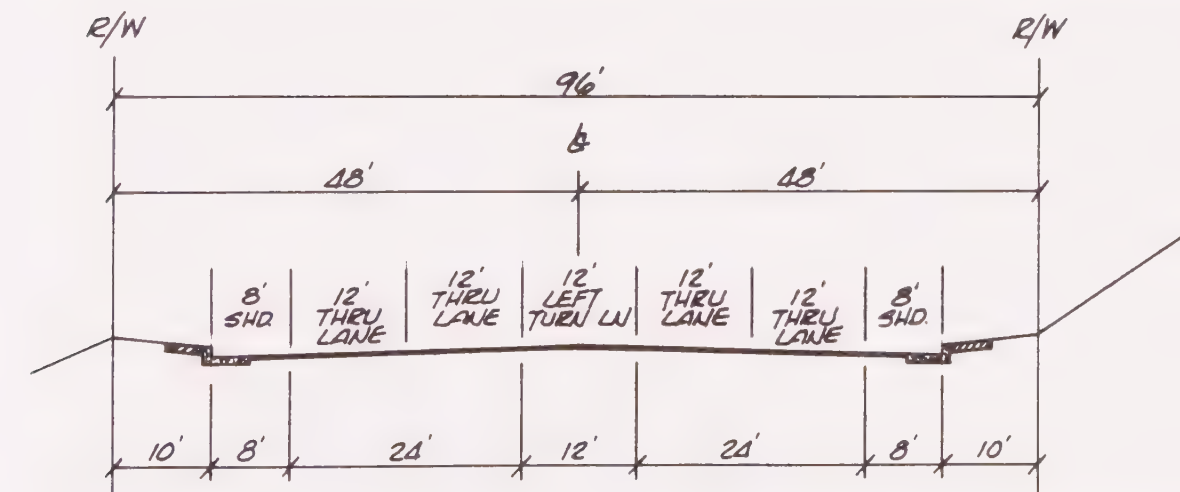
FIGURE 7d. STREET STANDARDS, CROSS-SECTIONS



110' R/W EXPRESSWAY THOROUGHFARE STANDARD



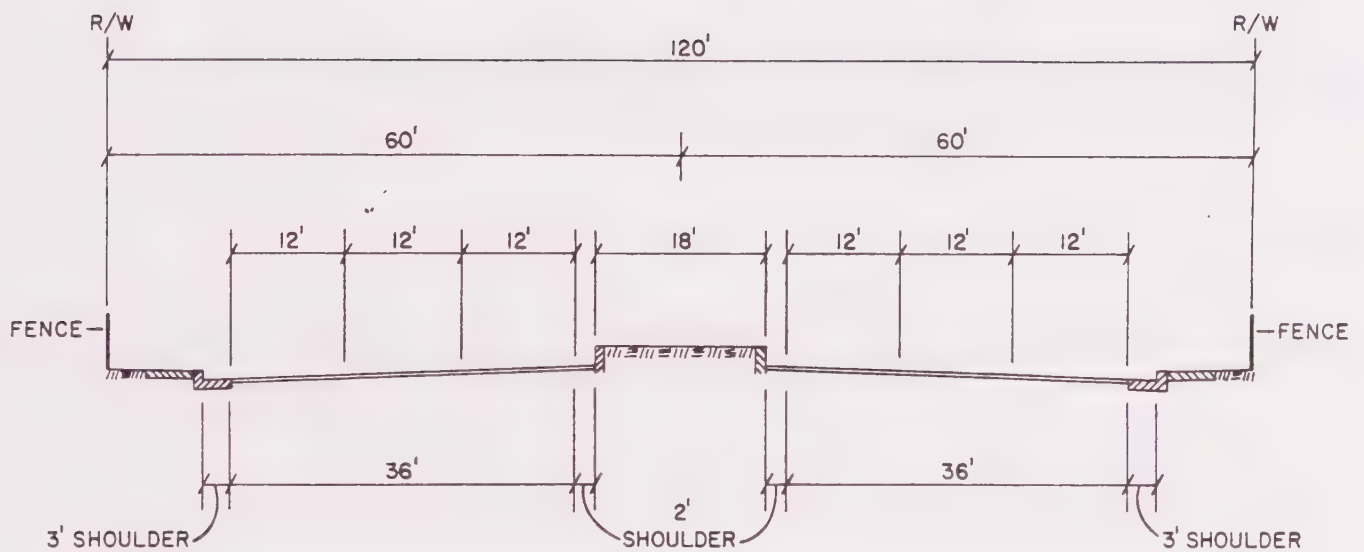
110' R/W 6 LANE EXPRESSWAY THOROUGHFARE OPTION



96' R/W MAJOR ARTERIAL THOROUGHFARE STANDARD

FIGURE 7e

STREET STANDARD CROSS SECTION



120' 6-LANE EXPRESSWAY THOROUGHFARE STANDARD

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Marvin Bennett, Anderson City Council
Robert Bosworth, City of Redding Planning Commissioner
Kelly Combs, City of Redding Planning Commissioner
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Howard Kirkpatrick, Redding City Council
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COUNTY OF SHASTA PLANNING COMMISSION

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APPENDIX

APPENDIX A

TRAFFIC ANALYSIS AND PROJECTIONS

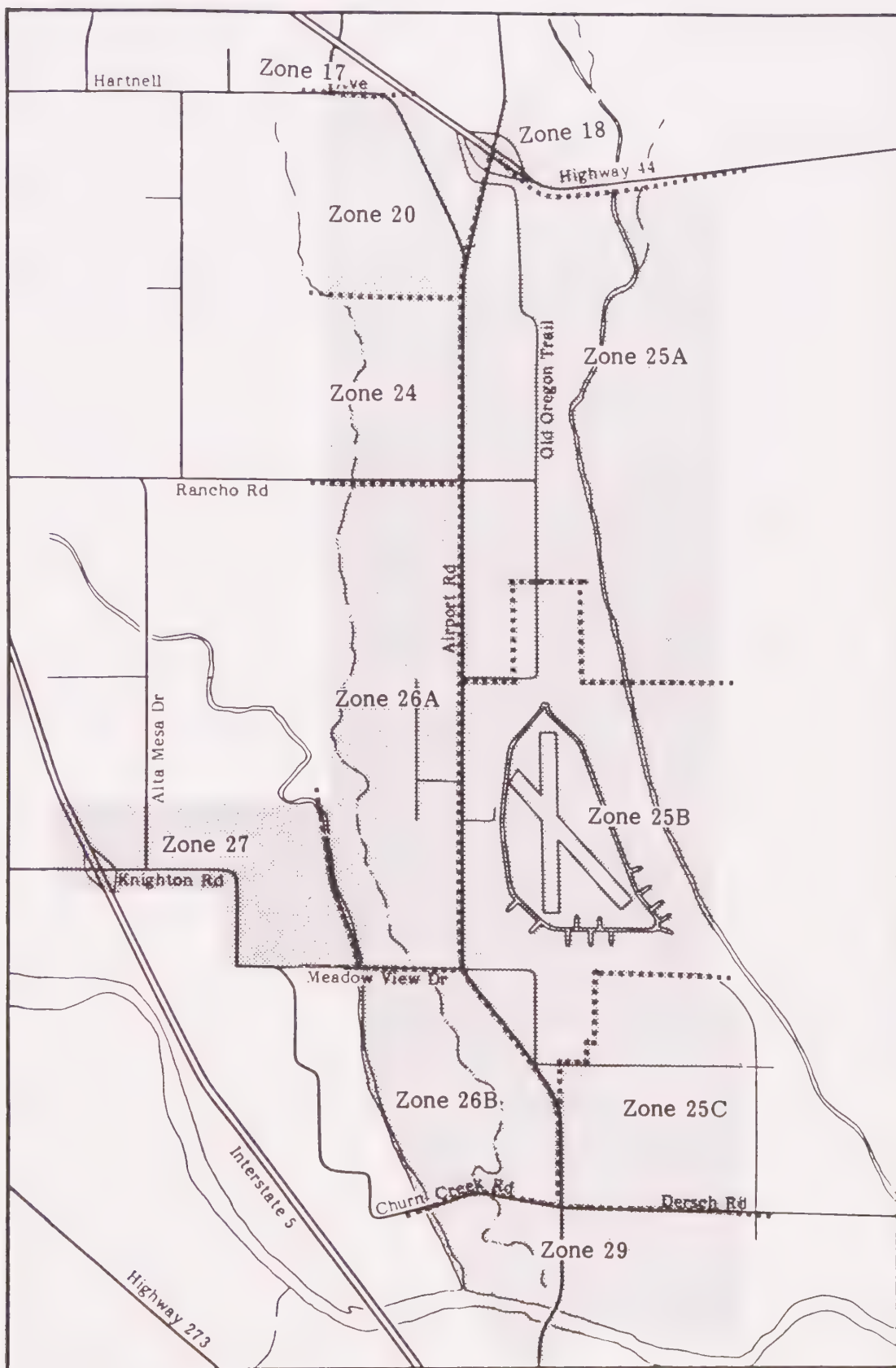
Assumptions

1. Traffic zone 27 (see Figure A1) and the portion of the planning areas within the City of Anderson were not included in the analysis. Trips from these areas are assumed to use I-5 for trips to Redding or Anderson. Trips from these zones that would enter the planning area for shopping or work are accounted for in the trip generation rates for commercial and industrial uses.
2. Twenty percent of all residential-generated trips have been allocated to shopping in the planning area and are subtracted from the residential-generated trips so as not to double count them. These trips are accounted for in the trip ends assigned to retail use.
3. Through trips from Anderson to destinations east on Highway 44 are estimated to be 2,000 per day.
4. Trips between the planning area and Anderson are assumed to use the Airport Road corridor, which includes Airport Road and the proposed Airport Road bypass.
5. Trips between the planning area and Redding are assumed to use three separate corridors:
 - A. The Knighton Road corridor, which includes the proposed Knighton Road extension and Meadow View Drive.
 - B. The Rancho Road corridor, which includes Rancho Road and the proposed Shasta View Drive.
 - C. The Highway 44/Argyle Way corridor, which includes Highway 44, Argyle Way, the proposed Venus Way, and relocated Hartnell Avenue as proposed.

Generation Rates

1. The airport is assumed to generate 3,600 trip ends (TE) per day. This is 2.6 times the 1981 count and is based on the projected increase in enplaned passengers.
2. Residential units are assumed to generate 10 TE per unit per day (source: Caltrans).
3. Industrial uses are assumed to generate 4 TE per day per employee; employees are calculated at 6 per acre. This is in the low range of Caltrans' estimates for industrial trip generation.
4. Retail commercial use is assumed to generate 850 TE per 10,000 square feet of gross flow area and highway commercial use is assumed to generate 100 TE per acre. These rates are in the low range of Caltrans' estimates.

Figure A1. TRAFFIC ZONES



5. Service and office commercial uses are assumed to generate 4 TE per day per employee; employees are calculated at 20 per acre. This figure is Caltrans' lowest.
6. No trips are generated for agriculture, recreational, school, and public or institutional uses.

Distribution Assumptions

1. Ninety percent of trips leaving the study area go to Redding and 10 percent go to Anderson, except in Traffic Zones 25C, 26B, and 29, where 75 percent go to Anderson and 25 percent to Redding.
2. Anderson-bound trips
 - A. All Anderson-bound trips from a particular traffic zone are counted in the traffic volume on the Airport Road corridor south of the zone.
 - B. Forty-five percent of the Anderson-bound trips are counted in the traffic volume of the Airport Road corridor on the segments of the corridor that are adjacent to the zone of origin.
2. Redding-bound trips
 - A. All Redding-bound trips from a particular traffic zone are counted in the traffic volume on segments of the Airport Road corridor north of the zone until such trips are assumed to exit along one of the Redding-bound corridors.
 - B. Forty-five percent of the Redding-bound trips are counted in the traffic volume of the segments of the Airport Road corridor that are adjacent to the zone of origin.
 - C. Redding-bound trips are assumed to use traffic corridors in the proportions illustrated in the following table:

TRIP END DISTRIBUTION OF REDDING-BOUND TRAFFIC BY TRAFFIC ZONES

<u>Traffic Zones</u>	<u>Knighton Road Corridor</u>	<u>Rancho Road Corridor</u>	<u>Highway 44/Argyle Corridor</u>
26B, 25C, and 29	60%	20%	20%
25B	75%	12.5%	12.5%
26A	50%	30%	20%
24 and 25A	—	50%	50%
17,18, and 20	—	—	100%

Traffic Projections

The total number of trip ends generated by uses in the planning area at build-out is 127,000. Using the assumption that each trip end within the planning area has another trip end outside the planning area (with modification to account for local shopping trips), the number of trip ends within the planning area equals the traffic volume crossing the planning area boundary.

In addition, 2,000 trips with no end in the planning area are assumed to use Airport Road as a through route, and the total volume is distributed among the major corridors as follows:

CORRIDOR VOLUMES AT PLANNING AREA BOUNDARY

<u>Destination</u>	<u>Traffic Corridor</u>	<u>Volume</u>
Redding	Knighton Road	21,000
	Rancho Road	23,000
	Highway44/Argyle	43,000
Anderson	Airport Road	40,000
Through	Airport Road	2,000
		<u>129,000</u>

Worksheets containing the calculations and assignments are a part of the project file.

RESOLUTION NO. 82-185

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDDING AMENDING THE GENERAL PLAN OF THE CITY OF REDDING BY ADOPTING GENERAL PLAN AMENDMENT GPA-1-82, THE MUNICIPAL AIRPORT AREA PLAN.

WHEREAS, the City of Anderson, the County of Shasta and the City of Redding entered into an agreement to jointly prepare a general plan for the Municipal Airport area; and

WHEREAS, the Municipal Airport Plan Committee, at the direction of the City Councils of the Cities of Anderson and Redding and the Board of Supervisors of the County of Shasta recommended a plan to the Planning Committee of each agency; and

WHEREAS, the City of Redding Planning Committee has jointly held public hearings with the Planning Commissions of the City of Anderson and Shasta County and has recommended that the City Council adopt the Plan; and

WHEREAS, the Plan was referred to various affected public agencies for review and comment; and

WHEREAS, following the required notices in accordance with law, the City Council held a joint public hearing with the Anderson City Council and the Shasta County Board of Supervisors on the Plan as recommended by the respective Planning Commissions and has carefully considered the evidence at said hearing; and

WHEREAS, the City Council has reviewed and approved the final environmental impact report, EIR-1-82, on the Plan, finding

that there were four significant effects on the environment regarding agricultural lands, traffic noise, air pollution and drainage, and that in response to these unsatisfied impacts, the Council adopted the following environmental findings:

1. Changes or alterations have been incorporated into the Area Plan and, therefore, the General Plan Amendment, which mitigate the significant agricultural lands, traffic noise, air pollution and drainage impacts as identified in the final EIR; however, these measures will not reduce these impacts to insignificant levels.
2. Specific economic, social or other considerations make feasible the project alternatives as identified in the final EIR in that:
 - (a) In view of the technical data developed by the Plan regarding noise and air safety, Alternative #1 is overly conservative and unnecessarily restrictive in nature;
 - (b) Alternative #1 places severe and financial burdens on the Airport Operator by requiring that nearly seven times the amount of land designated for acquisition by the other alternatives be purchased under this alternative.
 - (c) Alternative #2 would not comply with noise standards mandated by the State of California and would subject a larger resident population to a noisy environment.

- (d) Alternative #2 would establish the largest resident population of all the Plans, thereby building potential for inherent long-term land use conflicts.
 - (e) Alternative #3 utilizes the large lot agricultural designation for lands that, although they may have a soil capability of Class II, have low fertility. As a consequence, the cost of production is high and other more suitable lands outside the Plan area are being used to continue growing of the high value, capital intensive crops formerly associated with this area.
 - (f) The conversion of agricultural lands is already occurring. The high cost of agricultural activity in this area does not justify an agricultural designation if airport and community related land use concerns can be adequately addressed by the use of land use designations other than "agricultural".
3. As "statements of overriding considerations" for the unavoidable significant effects on the environment regarding conversion of agricultural lands, traffic noise, air pollution and drainage impacts, the following findings are determined to be appropriate:
- (a) That the Plan addresses safety and noise, land use, circulation and public facility concerns and will provide the guidance necessary to ensure that

development in the Airport planning area will be compatible with and supportive of the Airport function and will maximize its contribution to the growth and development of Redding, Anderson and Shasta County and will protect the health and safety of present and future residents and property owners within the planning area.

- (b) That the current General Plan does not address in sufficient detail the concern for long-term operational capability of the Airport nor the desire to adequately provide for and yet protect future residents and other property users within the area of influence of the Airport.
- (c) That the Plan will safeguard the airport from intrusion by uses that could limit the expansion of air service to Redding, Anderson, Shasta County and the Northern California region by recognizing the vital service provided by the Airport and the need to maintain a level of operation necessary to satisfy existing and future aviation requirements of the user communities.
- (d) That the Plan is designed to prevent development that could lead to safety problems for air travelers and persons residing or working in the airport environs.
- (e) That the Plan will permit persons who live, work

and own property near the Airport to enjoy a maximum amount of freedom from noise and other impacts generated by the operation of the Airport.

- (f) That the Plan will comply with Airport noise standards mandated by the State of California and will ensure a development pattern that is compatible with airport-generated noise.
- (g) That the Plan will protect the public investment in the Airport, a facility for which there is no feasible replacement.
- (h) That the Plan will recognize the airport's role as a major entry point for the cities of Redding and Anderson and the County of Shasta, and protect and enhance the appearance of the Airport area.
- (i) Although feasible, the alternatives do not substantially alter the total level of environmental impact.
- (j) That the selection of the "no project" alternative could mean that the objectives of the Plan would not be achieved and that present conditions would be perpetuated.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Redding does hereby amend the land use, circulation, open space and conservation, noise and safety elements of the Redding General Plan by incorporating therein the changes contained in GPA-1-82 as shown on Exhibit A attached hereto.

I HEREBY CERTIFY that the foregoing Resolution was introduced and read at a regular meeting of the City Council of the City of Redding on the 1st day of November , 1982, and was duly adopted at said meeting by the following vote:

AYES: COUNCILMEN: Demsher, Fulton, Kirkpatrick, Pugh, and Gard

NOES: COUNCILMEN: None

ABSENT: COUNCILMEN: None

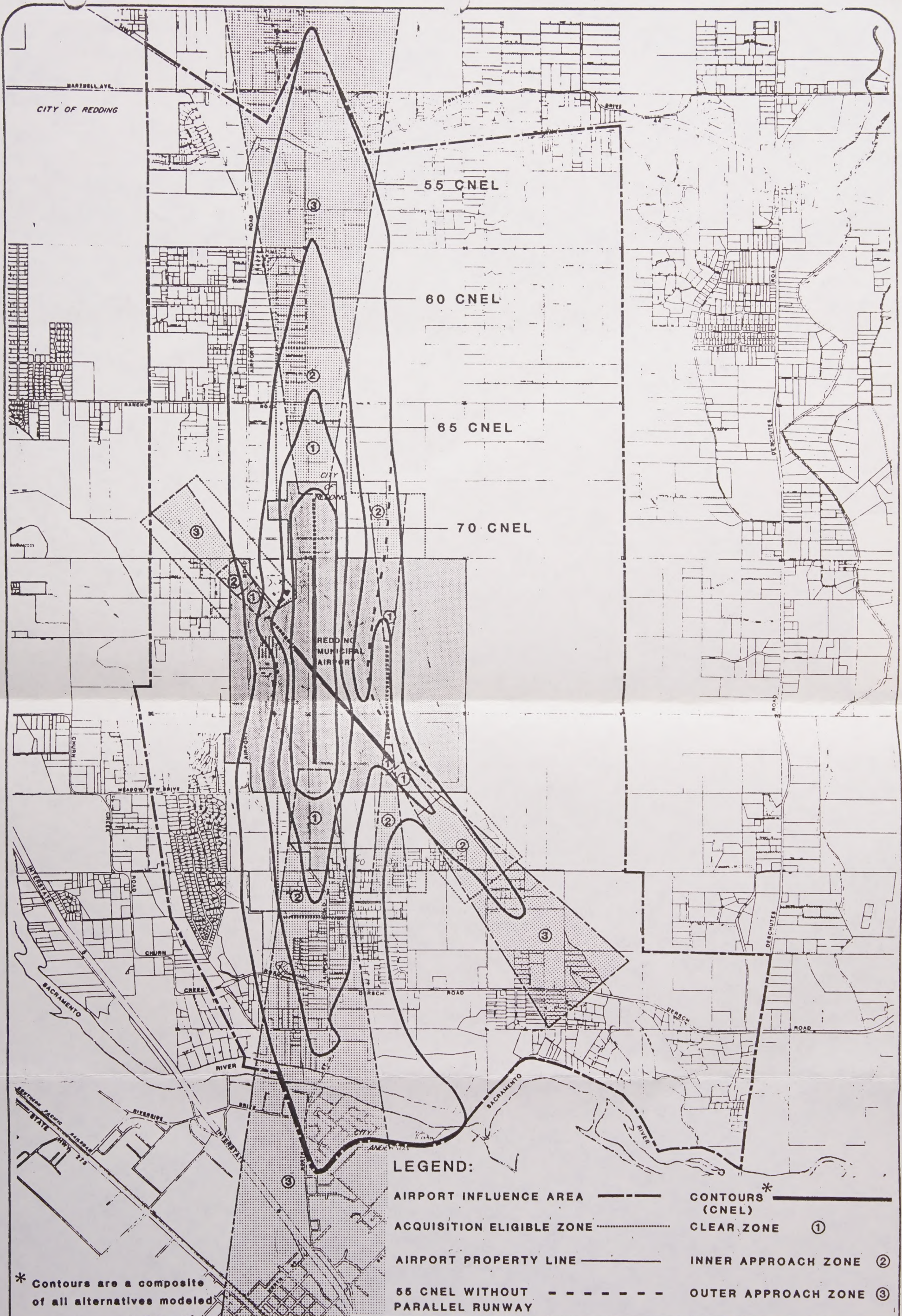
/s/ Barbara Allen Gard
BARBARA ALLEN GARD, Mayor
City of Redding

ATTEST:

/s/ Ethel A. Nichols
ETHEL A. NICHOLS, City Clerk

FORM APPROVED:

/s/ Randall A. Hays
RANDALL A. HAYS, City Attorney





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